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The Problem of Security

The Problem of Security

by

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Preface

THE intense desire of the people of this country is to win back a wave of prosperity for these islands and for the Empire. They are prepared to work hard to produce this result. The immense difficulties that lie before us are fully realised, but they can and will be overcome. There is only one factor that can prevent us from attaining this prosperity and that is if we fail to establish World Security. This includes both economic and military security. The former includes such problems as currency and tariff barriers; the latter needs no explanation.

All this is described in brief outline in Chapter 1 which includes a short survey of world and regional federation. The inevitable deduction from even such a superficial survey is that our military security for a long time to come will depend mainly on our own resources within our Commonwealth.

We now all realise only too well that peace can only be maintained by the possession of armed forces. Aggressors in the form of dictators will arise again as they have in the past unless the peaceful nations possess military forces which are properly directed. It is these dictators which we have usually fought in the past, more than the countries themselves. We fought Napoleon and not the French. We have been fighting Hitler more than the German people. At one time or another we have fought against or as allies of nearly every European country. It may be suggested that we are now entering a new era in which international military police forces will be maintained to deal with such aggressors, but it will be a long time before we reach that stage. The present position is that when a crisis arises we hope that the great nations will agree on any military action that is needed. The sovereign states concerned will then put armed forces into the field to carry out the military action which they have agreed to undertake. We are not likely to progress beyond this stage for a long time. It is to the armed forces of the Commonwealth that we must look, not only for our own security but as being the backbone of any defensive schemes for World Security. We are in a unique position to carry this out, situated as we are, and in possession of the naval and air bases necessary for the com-

munications throughout the Eastern hemisphere. It is therefore with the building up of the Commonwealth forces that we deal in this book and particularly with our policy for defence and the higher direction of war in any future campaigns in which the Commonwealth becomes involved.

Many new problems arise over this matter for which we will have to seek solutions. In doing so it is surprising how often it happens that the right solution is first suggested by someone of medium seniority. The right answer to a difficult problem usually needs a fresh idea, and it is officers between thirty and forty-five years of age who produce most of the new ideas. This applies equally in civil and military activities and the term officer is used to cover both.

I was one of a group of officers who were between these ages at the end of the First World War and during the period between the two wars. We discussed every imaginable military subject together. As we became older we dropped out and younger men took our places, but the "young Turk" party exists in every walk of life and is formed of officers of medium seniority. It is a wise leader who takes the trouble to obtain their views, for they are usually right. I have fought all my life to establish their views—sometimes with success but at other times the results were only achieved after long delays. When I was younger the ideas were sometimes mine. As I became older I obtained and pressed the views of the younger generation. In point of fact it is impossible to say who suggested a new idea in this present-day complicated world. In any case it does not matter so long as the result is achieved.

It is these views that appear in this book. Some of them have been proposed for a fairly long time and there is nothing very novel about them; others are comparatively new proposals, but they have the backing of success behind them. It was these officers who pressed so hard for the revival of the art of war which is described in Chapter 8. The introduction of fast tanks and the machine gun carrier, the large-scale use of wireless telephony for intercommunication in the field, the whole policy of having two types of tank to replace the heavy and light cavalry respectively of bygone days. All these methods in which we led the way in the revival of the art of war were suggested and started by these younger officers. The introduction of the Corps of Mechanical Engineers was another example, though we pressed for this without success for a great

many years. With the arrival of the tank the younger generation saw that man power would be replaced by machine power for a great many purposes in the army, and our work in that direction is given in outline at the end of Chapter 8. There are, of course, many other instances of the eventual success of our ideas and proposals. Sometimes we discussed political or social questions and some of these views are expressed in the first chapter of this book.

After Chapter 1 we deal with what is often considered the most important duty of any government, namely the defence of our Empire. This is spread over four chapters.

The best plans and schemes and proposals will, however, be of little avail without two very important attributes. These are good leaders and sound organisation. This is discussed in Chapters 6 and 7. Up to now our nation has rather trusted to luck to get good leaders and we have often claimed that we can make almost any organisation work. These slipshod methods may have been all right while we were so very rich and prosperous, but we can carry no handicaps in the years ahead of us.

In Chapter 8 our attempts to revive the art of war are described in some detail. This is almost entirely an army matter, but many lessons can nevertheless be deduced from this chapter. The determination and endless struggle to forge ahead in spite of every handicap. The fact that we certainly led the world in thought even if we could not put it into practice. These matters are worth careful thought. Did our industries set out after the First World War to lead the world in the revival of industrial methods? There is not very much sign of this. I think this chapter is worth reading from that point of view even if the reader should know little about the Army.

Although it comes at the end as Chapter 10, the problem of India is perhaps as important as any of these difficult matters. There are two subjects about which this country as a whole is almost completely ignorant. One is India and the other is Russia. I have left Russia for another book, but an attempt is made to deal with the problem of India in Chapter 10. Occupying as she does a very central position, the future of India is of vital importance to the defence, not only of the Commonwealth, but of the world.

The general trend of this book has been to describe the existing state of affairs and then to see how we must now make changes to meet the future. In describing the recent conditions the whole period between the two wars is often dealt with and in some cases

reference is made to the war conditions in the First World War. It may be the thought at first sight that we need not have bothered with anything that happened before the Second World War, but that is not the case. It is necessary to study the development over a fairly long period before one should make proposals for the future. In describing this work the word military is often used. It is intended in this book to cover all three fighting services, though the word is often used colloquially to mean the Army alone. A word of explanation is also needed over the use of the words "Empire" and "Imperial." It is now usual to refer to our Empire as a Commonwealth. Some names, however, such as the Committee of Imperial Defence, have been established by long usage and cannot well be changed. The words Imperial and Empire are therefore used in suitable places in this book though the term Commonwealth has been more commonly used.

In places I find that I have touched on matters which I discussed in some detail during the past year in articles which appeared in the *Evening Standard* and I must make acknowledgment to that paper for having stimulated me into expressing these views. I am also indebted to the new and progressive ideas which were developed, particularly in the earlier days, by Major-General J. F. C. Fuller and Captain B. H. Liddell Hart, and in addition to the views expressed in more recent times by Lieut.-General H. G. Martin and Captain Cyril Falls.

The atomic bomb appeared just after this book had gone to print. It is obvious that this form of explosive will have far-reaching effects on our methods of warfare. Our future defence forces, which are discussed at the end of Chapter 5, will have to be entirely remodelled. It seems probable, however, that the main principles which are dealt with in the whole of the rest of this book will remain true. When we reach the stage of being able to use atomic power (as opposed to the mere explosive force) we shall have to remodel the whole of our method of living throughout the world. This may not eventuate for a great many years. We cannot, however, afford to relax our study of these main principles, which are described throughout this book, during the period which is immediately ahead of us.

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An Outline of the Problem

OUR PROSPERITY

RIGHT at the start of this book I must confess to a strong feeling of optimism and to a belief that a great wave of prosperity will come to this country and our Empire within the space of a dozen years. Of course everyone knows all the reasons why we should take a pessimistic view. We are now very poor. We have expended most of our foreign investments. We must somehow build up a greatly increased export trade to pay for our imports. These and many other aspects lend themselves to a pessimistic outlook.

To overcome these difficulties we shall all have to work hard. We shall have to pull together and increase efficiency so that a great increase in production may result. New machinery and every form of labour-saving device must be introduced. I believe that all these things will come to pass. The people of this country and of our Empire possess initiative, drive and skill. They are among the most sensible people in the world. Our working people will naturally demand good pay for hard work and insist on a high standard of living. They will also demand social insurance to remove the dread of unemployment and sickness which has been such a source of grievance to them in the past.

There is nothing incompatible in the fulfilment of these demands and a simultaneous wave of prosperity. We will, of course, have to avoid extreme measures in any direction. Complete nationalisation and control of all activities by the State would ruin all chances of success. So would any large measure of monopolies or complete freedom for the individual. We can trust our Parliamentary system to shield us from any extremes of these natures. Agreement will no doubt be reached that some affairs must be dealt with on a

national basis, and that others are best left to private enterprise. It is, however, on the skill, initiative and drive of the individual that we have built up our Empire and world trade, and it is on this same basis that we will again build up another period of prosperity.

Although a return to prosperity depends on how we put our house in order and how well we solve these problems in our own country, it is very important to remember that all success is dependent on an overriding factor which we must now describe. This is world security. Without a solution to this problem there can be no raising of the standard of living or any new wave of prosperity for any of us in any part of the world.

The international discussion with other nations to establish some form of world security is by far the most important work which our Government must now carry out. We do not want the State to poke its nose into all our affairs. We need no advice as to who we shall employ and what they are to do. The trade unions and the employers working together can settle all these problems far better than any government body. On the other hand, no one but the Government can give us this vital World Security.

This question of security divides itself into two branches. The first contains all such matters as the breaking down of tariff barriers, the solution of currency problems, and the removal of all international obstacles that are restricting trade and thus reducing the standard of living of the world as a whole. This is a problem of immense difficulty and importance. The second branch of this problem deals with military security. How can we have any increase or even the maintenance of the existing standard of living if nations are to spend such a large part of their effort in the production of munitions and to wage a great destructive war in every quarter of a century?

These great subjects—the economical and military problems of the world—are entirely the affairs of the governments concerned. It is, of course, important that the people shall be educated in these matters so that they may support their governments, but they cannot do much to influence the discussions that take place between the nations concerned.

We have therefore reached this position. We all have an intense desire to regain prosperity, not only for ourselves but for the world as well. This will depend largely on the effort which each nation makes to put its house in order. Some will succeed and some will

fail, but the success of all of the nations depends on the overriding problems of establishing World Security. A whole series of books would be needed even to outline the alternatives for solving all these great questions. In this book we will now concentrate on the military side of the problem of World Security.

Military Security

Let us now see what has been happening in the world that has caused this loss of military security and a relapse into barbarity which has resulted in two World Wars in the last thirty years. It would seem that this problem can be answered somewhat on these lines. Originally mankind lived in families. It was a whole-time job for the family to work out an existence. There was no time for leisure or war with other families. Then families began to band themselves together in tribes or villages. Work could be shared. There was a little time for leisure and life was less uncertain, but as these matters progressed there was more time for strife between clans or villages. This tribal warfare became very tiresome, so they grouped themselves together in towns and countries. There was then sufficient labour available to raise armed forces. When disputes arose between towns or countries it was settled by war. This was so stupid and wasteful that towns and counties then banded themselves into nations. Mankind was now reaching a stage of law and order. This meant a great increase in time available for leisure. It also enabled the nations to divert a considerable proportion of wealth and man-power to preparation for war. Hence disputes that arose were again settled by force of arms. The wars, however, were usually fought by professional fighting men and some way from the heart of the country concerned. Hence they were not nearly so tiresome to the nation as the inter-town or village wars had been to the smaller places. Indeed nations often scored great advantage by force of arms up to comparatively modern times.

During the last half century, however, great changes have come about. Trade no longer goes to the man with the strongest sword. It is now world wide. Loss of trade caused by war in any quarter has an adverse effect on commerce generally. Then wars are no longer fought by comparatively small professional armies and navies. The whole nation becomes involved. As a result there is a world-wide feeling that we must continue the process that came to an end when

we grouped towns and counties into nations. If only we had continued this process a few hundred years ago and formed groups of nations as the next step all these terrible convulsions and world wars might never have taken place. Much thought and discussion has taken place on this subject during the last fifty years. There is no space in this book to present a proper historical survey of this important subject, but a brief outline is necessary at this stage.

Regional Federations

Many schemes have been prepared and proposed for grouping existing nations into what may be called regional federations. Some of the earliest proposals were made by Count Coudenhove Kalergi. To start with he concentrated his efforts on encouraging a European federation. His programme was as follows:—

1. European solidarity in foreign, military, economic and currency policies, with an effective guarantee to all the federated states of their independence, integrity, security and equality, and of the maintenance of their national character.
2. The peaceful settlement of all disputes between European states by a court of justice having at its disposal material and moral means necessary to make its decisions respected.
3. The progressive suppression of inter-European economic restrictions which are wrecking and ruining the European market.
4. The systematic organisation of collaboration in colonial matters with a view to fitting colonial raw materials and markets into the economic complex of Europe.

Count Kalergi used the Swiss organisation as his model. He argued that as the French, Germans and Italians had succeeded in co-operating so well in that country, the same system might be equally successful in Europe. Later on Count Kalergi made it clear that this was a prelude to the formation of a world-wide organisation based on the British Empire, America, the European federation and Russia. The aims of this organisation were to be taken from the Atlantic charter and limited to the following five issues:—

1. To establish an era of general peace and of international security.

2. To reduce the crushing burden of armaments.
3. To assure a rising prosperity all over the world by fullest economic collaboration and by equal access of all to trade and raw materials.
4. To improve labour standards, economic adjustment, and social security all over the world.
5. To assure the freedom of the seas.

At a later stage Clarence Streit produced his well-known proposals for "Union Now." These aimed at reaching world union in one step. Democracies were to bind themselves together in a union which was very much on the lines of the United States of America. It might start with only a few democracies and be gradually built up. His proposals did not seem attractive from a British point of view.

Perhaps the most recent proposal has been Culbertson's World Federation plan. This is based on the formation of eleven regional federations as follows:—

1. The American Federation, consisting of the Americas, exclusive of Canada.
2. The British Empire, exclusive of India.
3. The Latin European Federation, consisting of France, Italy, Spain and Portugal.
4. Germanic Federation, consisting of Germany and Austria.
5. Middle-European Federation, including Poland, Lithuania, Czechoslovakia, Roumania, Hungary, Yugoslavia, Bulgaria, Albania and Greece.
6. Middle-Eastern Federation of Turkey, Persia, Iraq, Syria, Palestine, Arabia, Egypt and Soudan.
7. Russian Federation of the U.S.S.R.
8. Chinese Federation, including Manchuria and Formosa.
9. Japanese Federation.
10. Malaysian Federation, including the Philippines and Thailand.
11. India.

A few nations such as Norway and Sweden are not included above, and could join any contiguous Federation. Africa is divided between the main regional federations.

These federations are linked together by the World Federation which is to have executive, legislative and judicial branches. The executive branch is headed by a World President with his cabinet.

For the first six years it is proposed that America should supply the President and that the British Empire should do so for the next period. The proposals are worked out in considerable detail in Culbertson's "Summary of World Federation Plan."

The main criticism of this proposal is that there are too many regional federations and that many of them would lack stability. For instance, the Middle East and the Malaysian federations would have no guidance from any of the greater powers and would be unlikely to prosper on their own. Moreover, it is unlikely that the British Empire would be able to agree to a separate federation controlling the Middle East and the Malay Straits, which lie astride our main sea communications.

A point of considerable interest and importance is that all these schemes assume that the nations concerned will submit to being directed by the body which controls their regional federation. This of course is the stumbling-block. Is there any solution? What did we do in our own Commonwealth? We made it into a completely voluntary association. The representatives of the Dominions gather together and discuss everything. When they part and return to their Dominions they can do as they please, but in point of fact they always support the plan on which general agreement has been reached. Would this work with other nations? Do they possess a sufficiently altruistic outlook to enable such a system to work? Marshal Foch once said that he would be delighted to make any pact or agreement with us because—"the British always do more than they promise." In fact the term regional federation is perhaps inappropriate to our Commonwealth. It may denote something more concentrated and less voluntary than that which exists between the Dominions. It is difficult to know how such a system would work, say, for a regional federation of Europe. This, of course, is easily the most important federation to be formed. From a military point of view it is quite essential to do so. What is the use of one nation in Europe raising large forces when her neighbour can destroy all her cities quite easily by using modern weapons and without putting a single soldier across the frontier. At present the individuals in the nations of Europe are spending all their time in trying to find the means to exist. They have no time to think of anything else. Presently, when they have a little more time, they will begin to look round and see that future warfare between the nations of Europe has become as silly as the feudal wars of seven hundred years

ago. Surely, there will be a natural desire to form some type of European pact. It may start among the Western nations and spread later to the whole of Europe. We should take a leading part in the formation of any such federation. Our quiet and unostentatious leadership would be a great help to the other nations in uniting together. At one time it was thought that the Dominions would not welcome such activity on our part, but more recent expressions of opinion indicate that they now see the necessity of this action and that they are most anxious that we should do so.

Let us see what the position would be on the assumption that some type of European federation was formed. There would then be four federations in existence if we accept the position that the United States of America would link North and South America (less Canada) into a federation.

The British Commonwealth.

The Federation of America (less Canada).

The U.S.S.R. Russia.

The Federation of Europe.

The largest of these federations would be the British Commonwealth. The most powerful at the moment would be the American. The youngest would be the U.S.S.R. If we want to organise the world on these four federations we would suggest that the British and European federations should jointly cover the whole of Africa. The British Commonwealth would take care of the Middle East. America should look after Japan. Scandinavia should be invited to join one of the federations. So far we have divided the greater part of the world into four spheres under these four federations. China and Malaya alone remain. They are at present incapable of self-preservation and should be cared for jointly by the British and American federations.

These are the kind of views that have been formed and discussed in recent years about regional federations. As the war reached the concluding stages they became of great importance. The authors of these views hoped that we would carry on with the process of grouping which had begun to cease some seven hundred years ago. The effect would be to establish a system of settling disputes over these enlarged areas. This was to include economic problems of tariff barriers and currency. The result should be an

increase in trade, and a raising of the standard of living which would then spread to the whole universe.

The world, however, was in an impatient mood at this stage. Why go through the process of building up groups of nations and then banding these groups together. Why should not the existing nations go straight to a World Federation? All the hopes which had been placed on regional federations began to fall to the background. The meeting at Dumbarton Oaks heralded the introduction of a World Security Plan founded on the ideas of the League of Nations. This received world-wide support and was followed by the Conference at San Francisco, where good headway was made in establishing a world organisation. It became clear, however, that much time would have to elapse before this organisation would be able to deal effectively with any great questions affecting military security. One began to wonder whether any time had really been saved by short circuiting the formation of groups of nations. Some form of federation by groups was in no way discouraged by the San Francisco conference; in fact, such proposals were encouraged, but the whole weight of attention and study was centred on the world organisation.

It began to appear that military security would depend mainly on military strength. There was no hope for the old proposals of an international military police force. None of the sovereign nations were prepared to give up their rights. The Dominions of the Commonwealth began to see the importance of remaining closely united. Even the keenest supporters of the world security organisation acknowledged that it could not be really effective for a very long time. If there was to be a long interval of this nature, on what were we to depend for military security during this period? The thoughts of many of us returned to consider the position of the British Commonwealth over military security.

The British Commonwealth

The question arises as to what position the British Commonwealth should take in the World Security Organisation. There are those who consider that our Commonwealth should speak with one voice at world conferences. They feel that we should have our own preliminary conferences and agree, for instance, on certain strategical plans under particular circumstances that might arise. We shall,

of course, have free discussion and much unanimity of view within the Commonwealth, but though the proposal that we should always speak with one voice on these matters seems sound and simple enough it ignores some inevitable complications that have arisen as regards world affairs. For instance, Canada has close connections with America, and though she is most anxious to retain her position in the Commonwealth she would be very averse to taking an action which would weaken this position. In a similar way Australia is closely connected with America in connection with the security of her communications in the Pacific, and although she is still more closely bound to the Commonwealth with mutual ties over trade and communications, she would not wish to agree beforehand to take any action which might cause serious disagreement with America. We therefore see that some of our Dominions have a natural attraction to come to agreements with any great nation in their geographical region, even though they have very strong ties and connections with the Commonwealth. There are some people who think that the end of our Empire is in sight if some of our Dominions co-operate on their own with other nations in this manner. There are others who take quite the opposite view and feel that associations of that nature will strengthen the position of the Commonwealth. They consider that in this way the Dominions concerned may bring that nation round to see our point of view in some matters, and that this will make for peace and understanding. Anyway, the position has arisen that although the Dominions are almost certain to co-operate with the Commonwealth policy when the occasion arises, they are not prepared to pledge themselves beforehand as to the action that they will take when a crisis arises.

In later chapters of this book we discuss military organisations for co-operation within the Commonwealth and it will be seen that we are all agreed that in future we must establish a Commonwealth staff in peace and war to discuss and come to agreement on all our military problems. As a result, that staff will consider all the more probable military dangers and recommend what forces and bases, etc., should be maintained and established by the various Dominions. In due course these recommendations will no doubt be confirmed by each Dominion and the forces will come into existence. At first sight this may seem that this is tantamount to the Dominions accepting a commitment for war, but that is not the case. The forces, bases and

communications will all be prepared, but the final decision on the action to be taken will still remain with each Dominion. When a crisis arises the telegrams will flash and the whole position will be explained. Each Dominion will then have the choice of a decision to enter the war or to stand out. On the other hand, if the Dominions had not agreed to make all these preliminary military preparations they would have had no choice as regards their action in the early stages of the war, other than that of onlookers because neither the forces nor the plans would have been prepared and ready for war. In point of fact, of course, the Dominions have every desire to co-operate with the Commonwealth in every way so long as they have been consulted, but they naturally wish to retain the final decision on such great questions in their own hands.

By far the most important matter which affects the whole Commonwealth is, of course, the point that we should be able to continue to ensure the security of the maritime and air communications which link the various portions of our Empire. This is discussed in some detail in later chapters, but it is mentioned here because views have been spread that the Commonwealth no longer has the strength to do so and this raises important points in connection with any world organisation. We are in a unique position in this direction. We have naval and air bases which enable us to maintain and secure these communications between the portions of our Commonwealth. It will be a sad day for the Commonwealth if we ever feel that we can no longer do so. At one time we controlled the communications of the world, but co-operation with America is now necessary for these duties on the waters of the Western hemisphere, but let no one think that we do not intend to carry out our traditional role in this connection on the waters of the rest of the world.

World Federation

We can now see the picture emerging more clearly. We see a World Federation consisting of some sixty sovereign states held in tow by the great nations, and only making slow and difficult progress. We see the British Commonwealth with its loose but typical British organisation coming rather closer together and exerting considerable influence on this world organisation. We must build up our Commonwealth and let it stand as an example to the world of a voluntary federation of nations for the promotion of peace

and prosperity. We should take a leading part in trying to establish some form of European federation. Russia or America may raise objections, but surely we will have the courage to do what we know is right. Our Foreign Office has been sadly lacking in courage and drive during the period since the end of the First World War. This has been partly due to the fact that our fighting forces were reduced to such a pitiable state by financial restrictions that we almost acquired an inferiority complex in international matters. We must rise far above this. Our prestige is high. Europe is waiting for our lead. The Commonwealth is ready to follow our lead. We hope to remain in friendly alliance with Russia. Above all, we wish to remain closely associated with America, but we must not shirk from following the course that we know is right. Plain speaking may be needed with both these countries. Russia understands that much better than suave diplomatic language. America also likes plain speech.

This then must be our plan. We must raise our Commonwealth defence forces and see that they are organised, trained and equipped on similar lines so that they may fight together as one army on the battlefield when the necessity arises. We must aim at developing some form of European federation so as to bring peace to that continent which has been the source of most of the great wars. Above all, we must maintain our sea and air communications which link together the various parts of our Empire and re-establish our great position as the carriers of trade along these routes. This is the rock of the Commonwealth on which a system for world peace may well be built. Let every Dominion do all it can to encourage other nations which are in their regions to understand our peaceful aims, but let us do nothing to weaken the position of our Commonwealth, for on that rock sits the whole structure of future world peace.

How the Empire Defends Itself

WE must first of all see what we considered to be the main principles for the defence of our Empire before the Second World War. They were quite clearly understood at that time by all those who were concerned with this work. I wrote them out in 1935 in the following form and it is well to examine them, before we consider what changes we may need to make to-day.

The Principles of Imperial Defence (1935)

Let us first recall how our Empire grew. It is probably fair to say that the growth was not caused by economic necessity or even by a desire for conquest; though profitable trading accompanied the expansion of the Empire, it was the spirit of adventure which was the chief urge to further expansion. It was therefore natural that an Empire which developed on these lines should adopt a democratic control; moreover, as the colonies were founded, their great distances alone safeguarded them from any possibility of centralised control from the Mother country. Thus the Empire grew with no particular plan or direction and was well described by Mr. Mackenzie King in 1926 as "a strange mystical sort of thing." A little later Mr. Balfour made the well-known definition of the relation of Great Britain to the Dominions as "autonomous communities within the British Empire. . . ."

Having grown up in this way, there is of course no machinery for co-ordination within the Empire. Dominions may have their own ambassadors and make treaties with foreign countries. It is true that there are Imperial conferences, but these cannot be considered as satisfactory institutions for co-operation between the communities which constitute the Empire.

The higher direction of war is discussed later, and proposals made to ameliorate this position, but for the present we must accept the resolution of the Imperial Conference of 1923, that it is for the Parliaments of the several parts of the Empire to decide the nature and extent of any action which should be taken by them. Though the communities of the Empire are individually independent, strategically they are entirely interdependent for defence; yet no strategical plans can be made beforehand for the defence of the Empire which can be considered as binding on the communities concerned.

Within these limitations, however, the Imperial Conference of 1923 agreed to two main principles which form the basis of our Imperial defence policy. The first of these was that each portion of the Empire shall be responsible for its own local defence. This includes responsibility for internal security as well as external aggression, and this applies to our foreign possessions as well as to our Dominions. It must, however, be remembered that it is a principle of war (which overrides any principle for the defence of a particular Empire) that the minimum force shall be dispersed for local protection, and the maximum force kept concentrated, so as to be available for the main plan. Local security in each portion of the Empire can therefore only be maintained for a limited period, and in case of necessity, naval, air or military forces or a combination of these will be sent in relief or as a reinforcement. As an example, the necessary forces could not be maintained at Singapore as well as at all other foreign stations to render it secure for a prolonged period against the forces that might be brought against it. It is therefore garrisoned with the strength necessary to render it secure until such time as it can be reinforced if it should become seriously threatened. This is the first main principle.

The second main principle to which all are agreed is that our maritime communications must remain secure. This is probably the most important duty of the fighting services. The whole existence of the Empire and the economic survival for more than a few months of the heart of the Empire depends on these communications. In addition, when considering the first principle it became clear that the ultimate security of many portions of the Empire depended on the arrival of reinforcements, and this in turn depends on the security of these maritime communications.

We can now turn to consider some of the methods by which these

two main principles can be secured. The Navy must, of course, always be maintained at a strength sufficient to meet the main fleet of any potential enemy or enemies and to secure our main trade routes. It is not possible to define the necessary strength of the Navy. This must depend on time and circumstances. We are now in the process of building a fleet which shall be capable of meeting a potential enemy fleet in the Far East, while at the same time giving us security in Europe. This is forced on us by the political situation. At other times a different standard of strength will suffice. Whatever may be the strength of the Navy it is, of course, entirely dependent for its mobility on the possession of naval bases and facilities for repair and refuelling. The guarding of these bases is therefore of great importance.

We have seen that it is necessary to keep reserves of all three fighting services concentrated at certain points. These are necessary to implement whatever strategical plan is adopted to force our will on the enemy when peaceful methods have failed. In addition they are required to relieve or reinforce local forces in the various parts of the Empire if they become seriously threatened.

Small military forces and considerable air forces are kept in the Middle East as a reserve. These are particularly valuable as they are available for use immediately at a time when the maritime communications might be temporarily closed and reserves from the home country might not be able to reach the threatened locality. There are also considerable military forces and rather small air forces in India. These are not really more than sufficient for local security, and in the event of large-scale external aggression the forces in India might well have to be reinforced. Under quiet conditions, however, India can and has at times served as a valuable source of reserve troops, for use in the East or Middle East. The remaining reserves are all held in Great Britain, and the Dominions provide no reserves for this purpose. In most cases the Dominions possess the necessary naval forces for local defence and coastal trade, but no Dominion has yet been able to augment the British Battle Fleet which stands as our reserve. Nor would it be easy for them to do so, because naval forces must live and train together in peace if they are to fight in concert in a great naval battle.

The provision of military forces as a reserve would, however, seem to be within the bounds of possibility, if warfare continues to be so prevalent as at present. For instance, foreign possessions,

with their naval bases such as those of Hong Kong and Singapore, are of considerable importance to the Dominion of Australia, and they are far nearer to her than to Great Britain. It may well be that in the future the first reinforcements for stations such as these might come from the Dominion most concerned.

While discussing Dominion forces it is well to mention the importance of equipping, organising and training all the forces of the Empire on similar lines. This is now generally accepted, and as Great Britain possesses by far the greatest forces, her system is used and followed by others. This will do much to facilitate the co-operation which will have to take place between the forces from the various parts of the Empire when any great issue is at stake.

Little mention has so far been made about air forces. The main concern about air forces at the present time is in connection with home defence. Great Britain represents the heart of the Empire and London is the focal point of all our maritime communications. The defence of Great Britain and London in particular is therefore vital. At present the main danger is from air attack, and we need a powerful fighter force for protection. We must also have a bomber force to attack and threaten the vital centres in enemy territory and his communications. In addition we must not minimise the great effect which aircraft will have in modern war when used in co-operation with naval or military forces. A point which should be mentioned in connection with air forces is the ease with which they can be concentrated at any threatened point. This makes air forces particularly suitable for use as reserves in many places abroad.

In the case of the Dominions their vast spaces lend themselves more to the employment of aircraft for civilian purposes than the cramped conditions in the Mother country, and all the Dominions have become very air minded and are making full use of air forces. Moreover, the Dominions have to defend extensive frontiers with limited resources, and under these conditions there is much to be said for an extended use of aircraft, and they may often represent the best value for the money expended. We may reach a time when the air forces of the Empire will be able to concentrate in a few days at any threatened point and present an overwhelmingly strong force to meet any threat that might arise. In that event, air routes would become almost as important to us as are the maritime communications of to-day.

This paper on Imperial defence cannot be concluded without some

reference to the necessity for education in the subject among all the communities of the Empire.

It should be accepted that it is essential for the individual citizens who live in the various parts of the Empire to have some knowledge of the broader aspects of Imperial defence. It is the citizen who has eventually to provide the money or the service for defence and he should, therefore, have some understanding of the subject. Without this he may well lack confidence in the policy adopted by the leaders and may refrain from giving them the necessary support at the crucial moment.

This lack of understanding has been apparent from the earliest days of the Empire. As early as 1845 we find Mr. Gladstone saying, with reference to the Colonies, that we should "impress them that there is no greater mistake in politics than to suppose that you can separate the blessings of freedom from its burdens——". He went on to refer to the necessity for the Colonies to bear some share of the burden of defence, especially as they received freedom and were enabled to protect their own industries against ours by tariffs.

Eventually the Colonies began to assume responsibility for a portion of their defences. They undertook all duties connected with internal security and protection against external aggression to a minor degree. But here again a danger has crept in due to lack of a proper understanding of Imperial Defence. This danger has been referred to as "State Patriotism."

It is a very natural attitude for a portion of the Empire to be only concerned with its own immediate defence, but it is one which militates against proper co-operation which is the only method by which the ultimate safety of the Empire can be assured. This form of "State Patriotism" may easily lead to the retention of local forces in areas where no real dangers exist, whereas it is only by the concentration of such forces that military victory can be ensured. Furthermore, an enemy may play on such feelings, and by the use of diversions against local objectives he may increase this desire of one portion of the Empire to retain all its forces for local protection; the enemy may even, in this way, create a demand for a partial dispersion of forces which are already concentrated, in order to provide additional local defence.

It should be realised by all citizens that the defence of the Empire must be treated as a whole. For instance, the defence of sea communications in one part of the trade routes may be vitally important

to the existence of a community in some totally different part of the Empire. It becomes more certain every day that the future security of our Empire will depend on the free co-operation of all the communities for the defence of the whole and not on the concentration of these communities for their own local defence alone.

Education to instil these views among the citizens of the Empire is becoming nearly as important as the existence of the necessary defence forces.

How these Principles stood the Test

Let us now see how these principles stood the test and how they failed. As military students before the Second World War we were not very happy about the co-ordination between the various parts of our Empire for defence purpose. The view was expressed that although “. . . there are Imperial conferences, they cannot be considered as satisfactory institutions for co-operation between the communities which constitute the Empire.” We were worried because no orders or directions could be given to the Dominions. Actually there was little difficulty from this cause. The Dominions usually did more than they had promised to do. It may be that a very loose organisation of that nature suits us best. Nevertheless, we refer to this again later and suggest a more concrete set-up for the higher direction of war.

Then the two main principles to which reference is made proved to be outstandingly true. As regards the first principle, we only retained small forces for the defence of the various portions of the Empire and concentrated the bulk of our forces for the main battles with the enemy. We saw the Dominions sending considerable forces to the Middle East and North Africa and later to France and Italy in the most unselfish manner and without being unduly concerned (as Australia might well have been) about the security of portions of their own territory.

As regards the second principle, we decided to provide the financial resources to build up our fleet and air forces to the necessary size at too late an hour to enable the work to be done in the time available. As a result we lost control of the maritime communications in the Far East. These communications passed into Japanese hands and this undermined all our plans and methods for the defence of our Far Eastern possessions. The Japanese were able to use forces

against us in those regions which were far in excess of the strength which they could have employed if they had not secured control of those communications. We had not the means to regain the security of these sea and air routes, and as a result we lost Hong Kong and Singapore.

If we had maintained these two principles for the whole period between the two world wars all would have been well. As regards reserves, the suggestions that these should be kept in the Middle East and India proved to be sound. Though these reserves were small they were composed of highly trained regular troops making full use of motor transport and containing some armoured units. When Italy declared war we saw Field-Marshal Wavell advance against them and drive them out of Libya with these forces which numbered about one-third of the enemy strength. Before this was even completed he turned to East Africa and struck again. Within two and a half months Eritrea and Somaliland and the greater part of Abyssinia were in our hands. This was the way in which these small but highly trained reserves, working with the air forces, were able to secure that vital centre of communications in the Middle East. In Iraq a local rebellion caused a serious threat to our important air base at Habbaniya. In this case we had to draw on reserves from India and in a very short time that base on which all our inter-communication by air depended was rendered secure.

As the war progressed the forces from the various parts of the Empire worked more and more together. The great value of the fact that they had all adopted the same methods in organisation and training and were all equipped with similar weapons was amply proved. They could work together as one army and they frequently did so.

As regards the work and the value of air forces acting in co-operation with the other services, our hopes and expectations were met to the full. The same applied to the Fighter Command for the defence of our country. As regards the independent Bomber Command, their efficiency, courage and determination was beyond all praise, but the great and very high hopes which their leaders had set on the effect which they would produce on the enemy country and his morale were not reached. The Nazis were fanatically brave. It may be that any normal country that was not held down by a rule of terror would have surrendered to this terrible devastation. None of the Air Force leaders had ever credited an enemy nation

with the power of survival under anything like the scale of attack which was showered on Germany during this war.

Soldiers are often accused of undue conservatism and particularly of having underestimated in the past the great value of air forces in military operations. It is quite true that few of us ever felt quite convinced about the claims which the Air Force leaders were making for the powers of independent bombing forces. As regards their work in co-operation with the other services, however, we were fully alive to the great role which they would play. The principles which are given in this chapter were written in 1935 after discussion with other soldiers. It may be of interest to note that they definitely credited the air forces with the full powers in these directions which they substantiated in the Second World War.

As regards the defence of our Commonwealth as a whole, it seems unlikely that we shall need to change our main principles. Changes in weapons and the technique of war do not necessarily change main principles. The general trend will, however, certainly be towards a great increase in the use of air forces, and the Dominions will have to take over an increasing share in the responsibility for Empire Defence.

The Committee of Imperial Defence

THE ORIGIN OF THE COMMITTEE

IN Chapter 2 we considered the main principles for the defence of our Empire and we referred to the fact that we lacked any proper organisation for co-operation with the Dominions over questions dealing with the defence of the Empire and for the higher direction of war. The lack of such an organisation had been felt for a long time. After the South African War a very important committee sat under the chairmanship of Lord Esher to consider many aspects of defence. Referring to War Office reform they stated that: "We are driven to the conclusion that no measure of War Office reform will avail unless it is associated with the provision for obtaining and co-ordinating for the use of the Cabinet all the information and the expert advice required for shaping the national policy for war and for determining the necessary preparations in peace. Such information and advice must necessarily embrace not only the sphere of the War Office but also the spheres of the Admiralty and of other offices of State."

The proposal made by this committee was that there should be a Committee of Imperial Defence. The Prime Minister was to be the "invariable President" and he was to have absolute discretion in the selection or variation of the members. The Government accepted the recommendation and the Committee of Imperial Defence was duly formed in May 1904. It had a small permanent secretariat to provide continuity and the offices were in Whitehall Gardens.

It will be seen presently that this committee could not be the whole answer to the problem of providing the organisation which we needed for co-ordinating defence in the Empire and for assisting

in the higher direction of war, but it provided a useful start. It is discussed further in Chapter 4 when our suggestions for the organisation for the higher direction of war are considered in some detail, and it forms part of those proposals. We must therefore examine how this committee carried out its work and how it was built up.

There are two fundamental characteristics about the Committee of Imperial Defence that must be clearly understood. The first of these is that it has no executive authority. The second is that it has a very elastic organisation. It has no fixed composition. The Prime Minister can invite whom he likes to attend. Any British citizen who might be useful to the committee can be invited to attend, quite irrespective of whether he belongs to the Government or any political party or profession.

Returning to the first of these characteristics the committee exists to co-ordinate and give advice. The constitutional position is that this committee advises, the Cabinet decides and the Department concerned then takes the necessary executive action. Naturally the advice of a committee which has the Prime Minister as chairman and is attended by the heads of the services and by cabinet ministers is taken almost automatically. In fact, in nearly every case the departments concerned take the executive action on their own responsibility as soon as the Committee has agreed to a proposal. In the case of very important decisions, however, the matter may be referred to a full cabinet meeting before the final decision is made. For instance, in the event of some military action being necessary in some area on a fairly large scale, the committee of Imperial Defence would prepare plans and recommendations covering the combined action by the services. As a result of this advice the Cabinet would then take a decision. This would then be set in motion by executive orders issued by the service ministries; the Foreign Office would deal with any diplomatic matters involved and the Board of Trade would take up the necessary shipping, etc. It is of course obvious that this committee must be limited in that way. An impossible position would be reached at once if they had executive power and began issuing orders to the services. There is a head or Chief of Staff to each service who is responsible for the technical control of that service, and his position would be quite impossible if any other body could issue orders. Similarly on the political side there is a Secretary of State or First Lord who is

responsible to Parliament for that service, and he would equally be in an impossible position if he was short-circuited in that way.

It may be thought that this system would be cumbersome, but actually that has not proved to be the case. The organisation is very elastic and much can be done verbally in matters of emergency. On several occasions of this nature the advice of the committee has been obtained and the necessary executive action taken in so short a time as a few hours.

The above remarks refer mainly to the position and organisation of the Committee of Imperial Defence before the First World War. During that period they worked out some great questions which had never been properly considered, such as the respective roles of each service in Imperial defence. The defence of Great Britain against attack was worked out in detail and much work was done on the defence of India. The whole of our system of coast defence throughout the Empire was reviewed.

Work of this nature became the normal routine of the Committee, but for some years before 1914 they prepared plans for the proper co-operation of all authorities, both at home and abroad in the event of a great continental war. These plans and preparations covered a wide range of subjects which included such matters as provision and movements of merchant shipping, plans for internal security and prevention of sabotage at home and abroad, the control and censorship of posts, telegraphs and Press. Most of these matters were dealt with by sub-committees, passed by the main committee and then entered in the War Book.

Work during the First World War

In 1914 the work of this committee was put to the test. Mr. Lloyd George referred to their work as follows:—

“Most of the plans had been carefully thought out during the tranquil years of peace by numerous sub-committees of the Committee of Imperial Defence. Of what was accomplished by that remarkable body in the years before the War and of its foresight, nothing has yet been mentioned. . . .

“When war was thrust upon us, plans which played a vital part in our achievement of victory lay at hand, . . . prepared to the last detail and ready to be put into execution.”

After the first few weeks of war Mr. Asquith formed a War Council as he found meetings of the whole Cabinet slow and cumbersome. The Committee of Imperial Defence was gathered into this War Council. A little later the name was changed and called the War Committee; this body was in effect taking all except main decisions on war measures. When Mr. Lloyd George became Prime Minister he at once formed a War Cabinet of himself and five ministers. None of them had a portfolio except Mr. Bonar Law, and they were therefore able to spend their whole attention on war measures. The Committee of Imperial Defence was absorbed into this War Cabinet though the chief features of the Committee and all its sub-committees were carried on as before. They retained the same system of permanent staff and their close association with the Chiefs of Staff. Before the end of the War there were no less than two hundred sub-committees all adapted as necessary to the immediate demands of the campaign. This system was retained till the end of the War. There are naturally certain points which are open to criticism, but post-war investigations show that the German organisation was certainly less well adapted to their needs. It was severely criticised by General Ludendorf.

The Period between the Two World Wars

After the First World War we returned to a Cabinet of normal size and the Committee of Imperial Defence returned to its original form, but it was now faced with a far wider variety of problems. There were now three services to co-ordinate instead of two. This made the importance and urgency of the work all the greater. Moreover, considerations of war measures now concerned and affected the whole nation, whereas these matters had been mainly confined to the fighting services before the First World War. Nearly all the State departments were concerned in these matters in one way or another. Then the introduction of air forces had seriously affected the whole outlook of the defences of these isles. In fact we could no longer consider ourselves as an island from the point of view of enemy aggression; nor could we now count on a considerable interval of time to mobilise the resources of our Empire before we were attacked. The Committee of Imperial Defence had to adapt itself to meet these new conditions, but in principle it was organised in much the same way. It still remained a very elastic

organisation and it was still limited to providing advice without any executive authority. The Prime Minister normally appointed a permanent panel of ministers or officials who should normally attend meetings of the Committee without special invitation. These included the Secretaries of State, the Chancellor of the Exchequer, the Home Secretary, the First Lord of the Admiralty and the heads of the three fighting services. In addition to the permanent panel other Ministers or experts of every kind were invited to attend meetings when the problems under consideration required their experience. The general organisation of the Committee was divided into five main branches as follows:—

Strategy and Planning Sub-committees.

Organisation for War Sub-committees.

Man Power Sub-committees.

Supply Sub-committees.

Miscellaneous (including Research and Experiment) Sub-committees.

These sub-committees are shown in groups for clearness and simplicity; the whole organisation was, of course, a very complicated family tree. Some of them were standing sub-committees, some were *ad hoc* committees to investigate special matters. In the course of a year something like a thousand different persons served on these committees and it was the co-ordinated result of their work which finally passed out as the advice of the Committee of Imperial Defence. This was the only way to deal with the work when the Committee had to handle such a wide variety of subjects.

We can now consider these five groups in more detail. In the strategical and planning group the most important sub-committee was that of the Chiefs of Staff which was introduced in 1923. This sub-committee could be convened at any time by the Chairman, but normally the three Chiefs of Staff met alone. Their responsibility was set out as follows by the Prime Minister:—

“In addition to the functions of the Chiefs of Staff as advisers on questions of sea, land or air policy respectively to their own Board or Council, each of the three Chiefs of Staff will have an individual and collective responsibility for advising on defence policy as a whole, the three constituting as it were a Super-Chiefs of the War Staff in Commission.”

The Chiefs of Staff therefore met to discuss the direction and supervision of combined plans, and in addition they gave advice on any current defence problems as they appeared. They met practically every week and sometimes much more frequently. They had under them a number of sub-committees. The Joint Planning Sub-committee consisted of the Directors of plans or their deputies in each service and their duty was to prepare combined plans in accordance with instructions from the Chiefs of Staff and to serve as a combined staff to that sub-committee. A joint Intelligence Sub-committee was formed in much the same way to provide the necessary intelligence for the Chiefs of Staff and the Planning Sub-committee.

In 1936 there was an important development in that three senior officers (one from each service) who had passed through the Imperial Defence College were appointed to the Planning Sub-committee as whole-time appointments on combined planning. This enabled the work to be carried out much more rapidly and thoroughly and was a great step forward.

The next group in the organisation of the committee is the War Group. One of its most important sub-committees in this group was that for Overseas Defence. The Permanent Under-Secretary of State for the Colonies was Chairman and the Sub-committee advised on all questions affecting the defences of our overseas colonies, protectorates, dependencies, and mandated territories. Other sub-committees in this group included that of Home Defence and the Joint Overseas and Home Defence Sub-committee which dealt with all defended ports and coast defences. At a later date a sub-committee of Civil Defence was added to advise the Minister for Civil Defence and the other authorities concerned with the new activities that had arisen in this direction. It is of interest to note that civil and military defence were both included in the Committee of Imperial Defence so that there should be complete co-ordination between them. There were, of course, numerous other sub-committees in this group dealing with such matters as the co-ordination of the work of the posts and telegraphs and censorship in war.

The sub-committees in the Man Power Group were of course formed to deal with the very difficult questions which arise at every turn on this very vexed subject. Somehow they do not seem to have met with as much success as the other groups.

Finally, we had the Supply Group which, as its name infers,

dealt with all supply problems, the Food Supply and the Oil Board, etc. The Principal Supply Officers' Sub-committee had a vast organisation working under it. The members of this sub-committee included the Supply members of the Board or Councils of the Admiralty, War Office and Air Ministry. Their main duty was to foresee and make provision for the whole of the nation's requirements in the event of war, both in raw materials and in manufactured articles. This, of course, included the identification of materials which might become unobtainable in war and advice as to the provision that should be made to meet this danger.

The secretariat of the Committee of Imperial Defence consisted of one secretary and eight assistant secretaries; of these two were Civil Servants and the remainder were officers from the fighting services. Their duties were entirely secretarial; that is, the arranging of the business and meetings of the various committees and recording the plans and reports.

An important point that has not so far been mentioned is that in 1936 the office of Minister for Co-ordination of Defence was created. Certain duties were delegated to him by the Prime Minister, and these included:

- (a) The general day to day supervision and control on the Prime Minister's behalf of the whole organisation and activity of the Committee of Imperial Defence. The discernment of any points that have not been taken up or are being pursued too slowly and (in consultation with the Prime Minister or other ministers or committees as required) of appropriating measures for their ratification.
- (b) In the Prime Minister's absence, taking the chair at the Committee of Imperial Defence.
- (c) Personal consultation with the Chiefs of Staff together, including the right to convene under his chairmanship the Chiefs of Staff Committee whenever he, or they, think desirable.
- (d) The chairmanship of the Principal Supply Officers Committee.

Work during the Second World War

We have now seen the set-up and work of the Committee of Imperial Defence* and its sub-committees during the period

* Referred to as the C.I.D.

between the two wars. When the Second World War broke out, the Committee was very soon gathered into the War Cabinet, as it had been for the First World War. The result of the work of the Committee as a whole was again found to be very valuable. The sub-committees, of course, continued with their duties, and the Chiefs of Staff Sub-committee met on most days. Certain new and very interesting points, however, arose. Before this war there had been many debates as to whether a supreme commander should be appointed for combined operations or whether the three services should continue under their own commanders, who would meet periodically to settle and agree on any outstanding points. Curiously enough the balance of favour before the war was on the side of retaining the three separate commanders. The stress of war, however, soon made it clear that it was essential to have a supreme commander in each main campaign if all three services were involved. The matter was naturally complicated by the fact that many Allied armies were fighting on our side. It says much for the qualities of these senior officers that so much good will prevailed in almost every theatre of war. We had General Eisenhower in supreme command in North Africa, who went later to take over the same position for the operations in France, while his place was taken by General Wilson. Later Field-Marshal Alexander took over command in the Mediterranean while Admiral Mountbatten was Supreme Commander in South-East Asia. General McArthur had been in supreme command for all this time in the Far East. This is how the United Nations reached general agreement very quickly and happily on these important questions.

The introduction of supreme commanders had a great effect on the work of these sub-committees and on the higher direction of war. Up to this time the three services had been quite ready to let them prepare the combined plan and then to carry out their own part under the general directive. But now, when the normal course was to have a supreme commander, he naturally wanted to make his own plans. No commander wants to fight on someone else's plan. As a result it came about that the sub-committees made the preliminary plans and carried out much valuable work until such time as the Supreme Commander was appointed. After that he himself took charge and completed the planning. This was the course of events in North Africa and for the invasion of France and became the normal technique under such conditions.

It seems likely that in the future the C.I.D. will carry on in much the same form but modified when necessary by any changes in the technique of warfare. There will be no difficulty over this for the C.I.D. has always retained an elastic organisation ready to suit the existing conditions of war. It will remain in an advisory capacity, carrying out very valuable work and ready to hand over all this work to any appointed supreme commander to enable him to make his final plans.

One important point however remains. There was much just criticism during both World Wars that the Dominions did not have due representation in these Imperial plans. The High Commissioners of the Dominions were called in at times to meetings of the C.I.D. and there were occasional Imperial Conferences, but the fact remains that our Dominions did not have full share or responsibility in the work of defence of the Empire. Nor did they have much share in the higher direction of the war. All these matters are very fully discussed in Chapter 4, which deals with the higher direction of war.

The Higher Direction of War

CO-ORDINATING THE EFFORTS OF ALLIED NATIONS

IT seems clear that a war between two great nations alone is a thing of the past. The whole world becomes drawn in almost at once. The higher direction of war on each side then becomes the problem of directing the armies of several nations. If warfare remains a matter of serious importance in the distant future we shall no doubt arrive in due course at an agreed system to which the great nations which are allied together on one side will at once submit for the direction of their allied armies. During this Second World War we solved this problem by periodical visits between the leaders and the staffs of the allied nations and by having military missions at each other's capitals to discuss matters and make explanations. In this way decisions were reached throwing certain responsibilities on each nation. The problem then resolved itself into how each nation should carry out the higher direction of their war to accomplish the tasks which they had agreed to carry out for the Allied cause. It would not be very profitable to examine in more detail the arrangements which we made to co-ordinate the efforts of the various Allied nations. A very elastic system and organisation were essential, and considering the difficulties involved, the results were surprisingly satisfactory. Much depended, however, on the systems in use for the higher direction of war in each nation or commonwealth. If these were based on sound systems then those nations were able to give of their best to the Allied cause. We will therefore now examine the system for the higher direction of war in the British Commonwealth. Although the main issue should be that this system suits the role of playing our part in co-operation with other nations in an Allied cause, we must remember that our organisation for the higher direction for war may also be needed at times to deal with

smaller wars in which our Commonwealth alone is concerned. The system which we adopt and the organisation which we propose to use is therefore of vital importance to our Empire.

The Development of our System for the Higher Direction in War

We saw in Chapter 3 how a small war cabinet was formed during the First World War and how the C.I.D. became absorbed into this body. Both the Cabinet and the C.I.D. resumed their original form after that war, but a small special cabinet was again formed on several occasions to meet emergencies between the two world wars. For instance, a special cabinet was formed to deal with the operations at Chanak in 1922 and later during the Abyssinian crisis. The position became accepted that a small and special cabinet would be formed to deal with any serious emergency in normal times and that a war cabinet would be formed for the direction of all the main activities during a major war. In the latter case the ministers were to be without portfolio so that they could allot their entire energies to the war. Both these forms of cabinet would, of course, use the C.I.D. to provide them with plans and reports and full information.

This was the course that was followed on the outbreak of the Second World War. A minister for co-ordination of defence had been appointed in peace and had filled a very useful role in that capacity and to deputise at times for the Prime Minister at the C.I.D. This appointment was, however, abolished and when Mr. Winston Churchill became Prime Minister he decided that he would carry out these entire duties himself. The best organisation in higher spheres of this nature is often a personal matter. Mr. Winston Churchill, with his boundless energy, was able to carry out these tremendous duties, and our whole Empire is grateful to him for this great work. It may well be, however, that with a different leader it would have been far better to retain the minister for co-ordination of defence. It would certainly have freed the Prime Minister to give more attention to the political and diplomatic side in Europe where we were bound to encounter great difficulties. It would also have freed the three chiefs of the fighting services from much work if there had been a minister in that position who was completely in their confidence and who could keep the Prime Minister fully informed of the military situation. This would have saved the necessity to collect the three Chiefs of Staff on such numerous

occasions to carry out this duty when they had other important matters awaiting their attention.

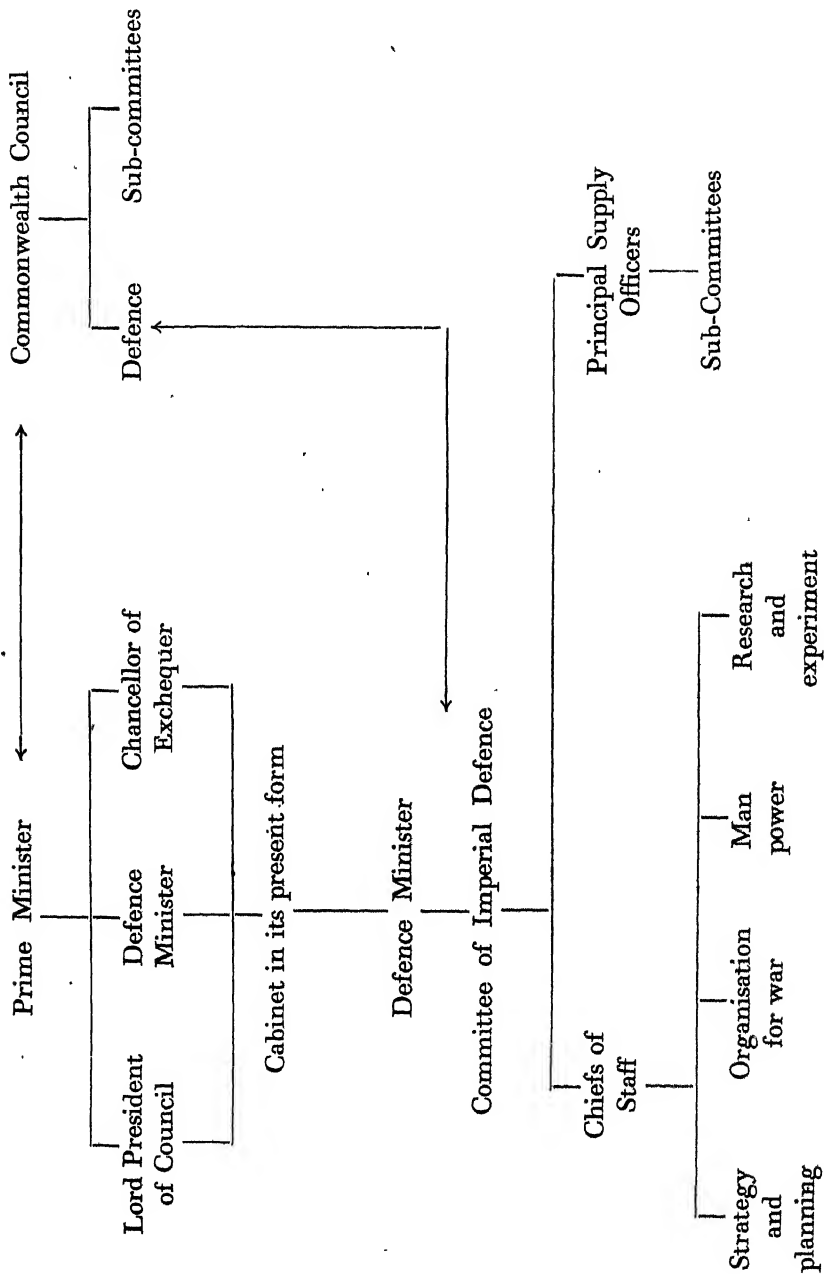
The Principles of the Higher Direction in War

We have now examined very briefly the general position that we have reached over this very important subject of the higher direction of war. Presently we will see if we can make suggestions to improve this organisation and system for future use. We must first, however, clear our minds on the main principles and then see how we can apply them. It is considered that there are four principles which should be part of any system for the higher direction of war.

- (a) The system must be constitutional;
- (b) The form which it shall take in war must be easily adaptable from the peace-time organisation;
- (c) It must be Imperial in character;
- (d) It must control the moral as well as the material side.

We will examine these principles in turn. Although much may be said in favour of appointing a dictator to control the higher direction of war, it is clear that no unconstitutional proposals of such a nature stand any chance of being accepted. We may decide that a much smaller cabinet is necessary or make other suggestions, but the form of control selected must be answerable to Parliament. Without this provision no form of control which can be suggested will be accepted by the people of this country. But although the final word must rest with the people, it is clearly desirable that the machinery employed for the higher direction of war shall be in the hands of a permanent staff. In this way, if the Government should fall, their successors will have the advantage of the uninterrupted service of the permanent officials with their accumulated knowledge and experience.

It is clearly essential that the form of control which is selected for war shall be capable of being put into force with the minimum of disruption. Hence, it is desirable that there shall be as little difference as possible between the form of organisation designed for the control of the higher direction in time of war and that responsible for defence in time of peace. The difficulty lies in the fact that executive power is less urgent and essential in peace than in war. In peace Parliament may become restive under executive action taken over



defence questions which might have been submitted to their judgment, and the Dominions cannot constitutionally surrender the control of defence questions which concern themselves to a body acting under the powers of the home government. Hence the machinery for the higher direction of war must act much more in an advisory capacity in peace than in war.

The problem of making the higher direction of war Imperial in character raises greater difficulties than any other question on this subject. It is clear that considerable changes will have to be made to put this on a proper basis.

Under modern conditions the whole nation is liable to be at war and it is no longer a question of controlling the fighting services alone. The questions dealing with man power and the industrial capacity of the nation have become an integral part of our policy in war. In addition such questions as the protection of the lives and the standard of living of the non-combatants, the well being of the troops, the feeling among the people as to whether the war is being efficiently conducted; these, and similar questions, all form part of the duties of the Government in the higher control in war.

Does our Present System include these Principles?

We are now in a position to see if our present ideas and organisation for the higher direction of war cover and include these basic principles. In the first place, the system is undoubtedly constitutional. Moreover, the machinery existing in the C.I.D., being of an advisory capacity, is not liable to disruption by a political upheaval.

As regards the second principle, whether we form a special Cabinet or a war Cabinet of ministers without portfolio, the change is comparatively easy from normal peace procedure. On the other hand, if the Government of the country was normally in the hands of a smaller Cabinet, change from peace to war conditions would be still more easily effected. This point will be referred to again later.

It is with regard to the Imperial character of the system that the first real weakness is revealed. Suggestions are made later for effecting an improvement in this direction, and although any improvement is faced with considerable difficulty, yet it does not appear that the present position can be considered satisfactory from this aspect. It is true that some of the Dominions have a watching brief at the C.I.D. and that the High Commissioners or their

representatives are called in whenever a point is under discussion which concerns them—in addition Imperial Conferences are held from time to time to consider important issues—yet, in spite of this, there appears to be little growth of real understanding of the great defence questions of the Empire by the Dominions as a whole. Nothing but a permanent institution in which the Dominions are represented by men who carry weight in their respective countries seems likely to overcome this estranged feeling of the Dominions on defence questions. Such a body must of necessity be advisory, and suggestions in this direction are made later.

As regards the question as to whether the present proposed systems of a small Cabinet working with the C.I.D. would cover the moral and material side, there should be little difficulty in this direction. All questions of policy and points affecting the efficiency of the services would be dealt with through the three Service Ministries with the co-ordinated advice of the C.I.D. Questions dealing with non-combatants and similar problems would be dealt with by the Cabinet through the normal channels of Government control.

Proposals for Improvement

At first it may appear that little is wrong with the present system; other, perhaps, than the necessity to strengthen the Imperial aspect. Although this may be largely true as a general statement, there is much lack of co-ordination in some directions, and other weaknesses, and the following suggestions are made with a view to eliminating these points and strengthening the whole system, without aiming at any revolutionary though ideal organisation which it would be almost impossible to persuade the people of this country and the Dominions in particular to accept.

In the first place, there would appear to be definite advantages in adopting the system of a small Cabinet for both peace and war. It is a curious thing that Government control and the control of all three services should take a form dissimilar to that which is used by all great commercial concerns. The latter have hammered out a system which has stood the test of time and proved itself to be efficient in the face of competition. It consists essentially of a board of directors who have no departmental duties but who are free to watch and criticise and shape the main policy accordingly; under this

direction the departmental managers are free to control their respective activities with a common aim in view.

This was exactly the system which was adopted by the Government under the stress of a great crisis during the First World War, when they formed the War Cabinet. The members of this Cabinet were few in number and corresponded exactly to the directors of a great commercial concern, and they had no departmental duties. It is difficult to see why this system should not be equally suitable in peace as in war. It was less necessary perhaps in the past, when our trade supremacy was unchallenged, but it is difficult to find any excuse for adopting a less efficient system in peace than in war under present-day conditions when we have to fight so hard to regain some of our lost trade. In these days we are or should be fighting for our existence in peace as hard as we are forced to do by enemy action in war. It is difficult to believe that the Cabinet with its present swollen dimensions can be really efficient, and we constantly find important considerations being shelved due to the difficulty of obtaining a decision from a Cabinet of this nature. It has been suggested that although a smaller cabinet might be of value in peace, it would not facilitate the change over to a small Cabinet in war, the reason being that the subjects of importance in peace and war tend to be of a different nature, so that the same personnel in a small Cabinet would not be suitable for both purposes. It is difficult to understand this argument, and it seems unreasonable to suggest that the same small Cabinet should not adjust itself to the changed conditions in war.

The concrete suggestion is, therefore, that within the Cabinet as it exists at present, there shall be a special small Cabinet consisting of the Premier and three special members. These members must have no departmental duties. One member of the special Cabinet would be nominated as deputy-leader in the House in war to relieve the Premier of this duty when necessary.

On occasions of great importance the whole Cabinet in its present form would be summoned, but normally the Cabinet of the Premier and the above three special members would take the necessary executive decisions. These members would be in the nature of Deputy Premiers, and would maintain a close liaison with the ministers who were not in the special cabinet, and the latter would, of course, be summoned to attend meetings of the special cabinet when decisions were to be taken which concerned them.

At first sight it might appear that a system of this nature was unnecessary in peace time. It may be thought that on crucial questions which might result in a close division in the House, a Cabinet decision by four men would not carry the weight of a full Cabinet meeting. But it should be borne in mind that any great issue in peace which might give rise to keen controversy would certainly be discussed by the whole Cabinet. The system would therefore allow of two types of Cabinet meeting—a full Cabinet in which every minister carried a vote, and a special Cabinet meeting which would be limited to the three special members and any ministers or experts summoned to attend. In the case of a special Cabinet meeting, only the special members would vote.

The great advantages of this system have already been demonstrated in war. In peace the value of a special Cabinet to deal with a crisis has already been demonstrated. It seems a short step to keep such a Cabinet in permanent existence, and the advantage of doing so would appear to be very great. Again and again some question arises which needs Cabinet decision; the question is one of considerable though not vital importance. Everyone concerned is agreed as to what the decision should be, but Cabinet authority is necessary before executive action can be taken. Cabinet meetings are held, but due to the length of the discussions on other matters, a decision on this particular question is shelved. How often does this not happen? Why cannot discussions on the other subjects (which are often of no very great importance) be curtailed so that the Cabinet can work efficiently? The answer is that with a large and cumbersome body discussion cannot be restricted to only what is necessary.

We can now turn to a consideration of the difficult question of providing machinery or an institution to increase the Imperial character of the Government. During both the World Wars an Imperial Cabinet sat on occasions and the Premiers represented their Dominions on this Cabinet when they were in the British Isles. The Imperial conferences that are held in peace from time to time are somewhat analagous to sessions of an Imperial Cabinet, but these in no way provide machinery or institutions for the proper study of all Imperial questions, including the very important question of Imperial defence. In this latter regard it is not sufficient to say that the question is covered by asking Dominion representatives to attend meetings of the Committee of Imperial Defence or its sub-committees when matters concerning themselves are discussed.

All questions on defence must or should concern all the Dominions. Moreover, such questions cannot be relegated to a restricted body such as the Committee of Imperial Defence; they cannot be divorced from the consequent political and financial problems which they will raise in the Dominions.

To solve this problem it has been suggested that a Commonwealth Council should exist. The duty of this Council would be to consider all Imperial questions, i.e. political questions, finance, economics, defence, and social problems. Another suggestion has been that there should be a permanent staff for the Imperial Conferences so that the Dominions and the home country should be linked together in thought during the long intervals between these Conferences. Whatever should be established, it is clear that it can only have exploratory and advisory powers, but even within these limits much could be done. Trade agreements and conformity in defence questions are more easily come by when they have been thoroughly discussed by both sides over a period of time.

It seems quite definite that some body of this nature which can give carefully prepared advice on all Imperial questions is an essential institution for the Empire. The difficulties are realised, but it is considered that much could be done to pave the way for the attainment of this object. It may be that the lead should come from the home country, but it is likely that faster progress would be made if the Dominions, or at any rate some of them, would give a lead. If this was done a start could be made in reply to a demand from the Dominions. It is not suggested that a Commonwealth Council should be instituted on which only part of the Dominions had agreed to serve, for this might lead to cleavage. But it is considered that if some committee were formed to discuss certain Empire questions at the request of some of the Dominions, the remainder would most certainly wish to hold a watching brief. A little later it might be their turn to desire to discuss Commonwealth questions with which they were more closely concerned; in this way it might become possible to build up gradually a full Commonwealth Council. Much machinery already exists for dealing with Empire questions, and what we need is a council to co-ordinate this work and issue suggestions and advice alike to the home country and all the Dominions.

For some time the Royal Institution for International Affairs has been in existence at Chatham House in London. Similar institutions

have arisen in our Dominions and India and other parts of the Commonwealth. These are unofficial bodies and they hold a Commonwealth relations conference from time to time to which all the institutions send delegates. In February 1945 one of these conferences was held in London which I attended. All the matters referred to in Chapter 1 were discussed at length and some of the points which appear in the remainder of this book were touched on. At the start there was a definite feeling of caution on the part of the Dominion delegates; they were anxious to avoid any commitments. As the conference proceeded the difficulties appeared much smaller. A large measure of agreement was reached. Very useful work was carried out during this fortnight's conference. Now these delegates represented very much what one would expect to find at a meeting of the proposed Commonwealth Council, and we therefore have a useful guide as to what results we might expect from such a Council. Our feeling at Chatham House was definitely that if only we could have a body of this nature in permanent session, all our difficulties would be solved. We thought that this Commonwealth Council should travel round spending some time in all the more important parts of the Empire, but the greater part of the time in London as being the heart of the Commonwealth. It seemed to us that in due course such a council would acquire great prestige and that its advice would become accepted almost as automatically as that of the C.I.D.

We must now turn to consider the machinery which the Government requires to co-ordinate defence problems. At present this duty is vested in the C.I.D. In its present form the C.I.D. includes within its activities the more essential features of a Ministry of Defence, except that it does not possess executive power. The question of the desirability of forming such a ministry has been fully discussed at various times. There are two points on which everyone is agreed. Firstly, that the Government need expert advice in forming their policy for defence in peace and for strategy in war. Secondly, that some form of co-ordination is necessary to avoid unnecessary waste in the administration of the three services. Unfortunately, these two points have been grouped together and a solution has been sought which would solve both questions. There is no one solution which will solve both questions. It is perfectly possible for one central authority to advise or decide on policy and higher strategy for the three services, but such a body would be quite unsuited for the

administration of all three services. The three services are each great concerns and little if any saving can be effected by grouping them into one great body for administration. Nor should any one minister be charged with the responsibility for their administration. What are required are co-ordinating committees to avoid overlap and waste of this nature in the administration of the three services. Such committees exist and all that is necessary to reach higher efficiency is to speed up the machinery for giving executive power to the recommendations of such committees.

It is, therefore, clear that something on the lines of the present C.I.D. is what we require for advice as to policy and higher strategy in peace and war. With a well-organised C.I.D., presided over by a minister responsible for inter-service co-ordination and for shaping the policy, there should be the minimum of delay between the giving of advice by the C.I.D. and executive authority issued by the Cabinet. In this way the policy and strategy for the defence forces should be well prepared and quick decisions reached. At the same time, the advice of inter-service committees dealing with administrative questions should receive prompt executive attention.

Until the present time it has been the custom that the Chiefs of Staff of the three British services, whose duty it is to control the service ministries, should also serve on the Chiefs of Staff Committee of the C.I.D. and give their combined advice to the Prime Minister. It would of course be possible to use two senior officers from each service to carry out these two duties. The argument has been raised that friction might result if these two posts were filled by different officers. In addition the officer who serves on the Chiefs of Staff Committee of the C.I.D. must obviously be the senior officer of that service. If a less senior officer was in charge of the service ministry it is again possible that friction might arise between that officer and a more senior commander in the field. Moreover, it is argued that the system of using the same officer for both duties worked well in the Second World War. As regards the Army, however, it can certainly be held that this dual duty prevented the Army Chief of Staff from giving sufficient time to the military affairs of the War Office. The work devolved on to deputies in the General Staff and the efficiency of the Army Council was reduced. Moreover, we must remember that a large share of the fighting forces in the future will certainly be provided by the Dominions. Why should a senior Dominion officer be automatically debarred from being one of the

Chiefs of Staff on the C.I.D.? He could hardly be head of the British Service Ministry, but there is no reason at all why he should not be the Chief of Staff of that service on the C.I.D. There is, therefore, much to be said for having different officers to fill these two posts in each service.

Although it could be argued that the same officer should fill these two roles, there can be no reasons, other than financial, for making the same officers carry out the staff work at each place. In fact there are the strongest reasons against such a course. What we require at the C.I.D. is a combined staff common to all three services; they must divorce their minds from any sense of inter-service competition and prejudices. This can best be achieved by a combined staff that works at the C.I.D. alone and has the minimum of departmental ties or leanings. We now have the personnel to form such a staff from officers and civil servants who have graduated at the Imperial Defence College or who have served at the Headquarters of Supreme Commanders in this war and we should make full use of them for this purpose. It is therefore recommended that officers from all three services should fill appointments on a permanent combined staff under the Chiefs of Staff at the C.I.D. to co-ordinate policy, plans and intelligence. But this only covers a portion of the work at the C.I.D. There are the equally important questions concerning supply and trade during war and Imperial communications, etc. These are civilian activities, but the policy in peace and war which is recommended to the Cabinet must depend as much on the work of the sub-committees dealing with this work as on the views formulated by the military committees. Hence the permanent staff of the C.I.D. must also include a number of civilian members to control and co-ordinate this work. Finally, it is important to bear in mind the desirability to employ a proportion of officers and civilians from each Dominion on the permanent staff of the C.I.D. It should be borne in mind that we have recommended that the part which the Dominions can take in Commonwealth defence should be discussed in the Commonwealth Council, which would advise all the Governments of the Empire accordingly, but all questions as to the method by which the Empire is to be defended would naturally be referred to the C.I.D. The Dominions will, therefore, have representatives on the Commonwealth Council to discuss such questions, but it is considered particularly desirable that they should also provide officers to fill some of the appointments on the Staff at the

C.I.D. It should be made clear that there is no proposal to replace by a permanent staff all individuals who work from time to time on various sub-committees at the C.I.D.; this would be both undesirable and unnecessary. The proposal is limited to forming a permanent combined staff drawn from each service and the Civil Service, sufficient in size to co-ordinate the work of the sub-committees and prepare the necessary defence plans in peace and strategical policy in war, for the advice of the Cabinet.

We are now in a position to examine how the higher control will be directed both in peace and war. In peace the C.I.D. will be charged with a constant examination of the political situation as deduced by the Foreign and India Offices and the submission of advice to the Cabinet as a result of this examination. The Cabinet will then call for further appreciations in preparation for certain eventualities. This will result in a definite defence policy to meet the existing political situation and to meet the future as far as it can be foreseen.

Acting on this policy it will then be the duty of the C.I.D. to appreciate the nature of the defence forces required by the British Commonwealth, and this will lead directly to advice submitted by the C.I.D. to the Cabinet as to the allocation of available funds and resources to each service.

In addition, it will be the duty of the C.I.D. to draw the attention of the Cabinet to other activities which may be taking place which will affect war. Problems of supply, trade, international law, communications and many kindred subjects are of vital importance in modern war, and Cabinet decisions will constantly be needed to direct the channel of some activities along a line which will be beneficial to us for defence purposes in war.

As regards the higher direction in war there seems little reason to depart from the methods used during the Second World War. The sub-committees provide information and advice and the combined planning staff produce their proposals for the Chiefs of Staff. When the Chiefs of Staff have reached agreement they put their plans before the War Cabinet, which takes final decisions and gives approval. Executive action is then taken by the service ministries.

In conclusion, it may be stated that the above proposals contain three main features for the fulfilment of the principles for the higher direction of war.

- (a) The proposals provide for the constitutional provision of a small cabinet so that quick executive decisions can be reached in both peace and war, and the minimum of disruption should occur in the change of control from peace to war conditions.
- (b) The proposals contain concrete suggestions which should lead to a system for the higher direction of war which is more Imperial in character.
- (c) The machinery which has been proposed for the co-ordination of policy and strategy in peace and war would have the necessary staff and should be suitable for dealing with any aspect of defence questions in peace or war.

CHAPTER

5

What Defence Forces Do We Need?

IN Chapter 3 we examined the views which we had held before the Second World War as regards the main principles for the defence of our Empire. We then examined how they had stood the test of war and whether we would want to modify them in any way to suit more modern conditions. In the same way we start this chapter by describing the ideas which we held as regards our requirements in defence forces before the Second World War as a prelude to a study of our present day or future requirements. But whereas there was fairly common agreement on our principles for defence purposes, very little discussion had been held before this war as to the correct proportion of defence forces that we required from each of the three services, bearing in mind the inevitable financial limitations. In fact while I was a student at the Imperial Defence College in 1935 I suggested that this would be a most excellent study to carry out at the College. I then consulted some officers from all three services and prepared the following paper on this subject called "What defence forces do we need?" The paper met with a large measure of agreement among my friends. It cannot be quoted as giving the approved views of those in authority at that time because no agreement of this nature had been reached, but it gives the views of officers of "medium" seniority from all three services with whom I used to discuss such matters.

Just as we found it helpful to study our pre-war views on the principles of defence, so in this case we may find it useful to examine these pre-war views on the defence forces that we considered that we needed from each service before we clear our minds on our post-war requirements.

The paper was written in three parts as given below. The first part dealt with the defence of Great Britain. The second part dealt with the defence of the British Empire abroad. The third part was.

intended to be written in three portions, each dealing with one of the three services. I wrote the Army portion myself, but as this was prepared in great detail only a précis is given below. We hoped that the other two portions would be prepared at the Imperial Defence College; in fact we hoped that the whole paper would be overhauled at that college where very able officers of all three services were gathered together and had the time to study such matters, but nothing much came of this and then the Second World War intervened.

It must, of course, be realised that this paper was written in 1935, before there was any great excitement about our rearmament and while the Treasury purse strings were still very tight. That explains the references which are made as to what we could "afford." The German forces were also quite limited in numbers at that time. It is not a bad thing to examine a paper written under such conditions because that may well resemble what we will have to face when considering such matters in post-war years. In several places this paper refers to "Mobile Divisions," which is the term which was used at that time to describe what we now call an "Armoured Division."

PART I

THE DEFENCE OF GREAT BRITAIN IN A EUROPEAN WAR*

A European war is the war which holds the greatest danger for our Empire. If we are defeated at home the Empire ceases to exist. For this reason our defence forces must be primarily designed to meet this danger and compromises must be accepted later to meet the less dangerous wars which may occur in other parts of the Empire.

From the point of view of defence it is obvious that our greatest danger in these islands is the destruction or capture of our merchant ships either before they reach the United Kingdom or in port after reaching their destination. Coupled with this is the danger of concentrated air attacks on London and on our key industries. Invasion is no longer a danger as no enemy could effect a landing so long as any serious portion of our Air Force remained intact.

To be quite secure against this danger, the ideal solution is to have a two-power standard Navy and a very powerful Air Force—

far more powerful than that of any other nation. If this is beyond our means, and it presumably is beyond them, then there are three alternatives from which we can choose to provide the next best possible security against this danger.

All three alternatives have certain common essentials and we will give these first before passing on to consider the alternative policies open to us.

- (a) Strong land defences against air attack with the necessary fighter aircraft.
- (b) A Navy with the necessary cruisers and sufficient capital ships to support them in giving security to our maritime communications abroad. Security in home waters will be considered later.
- (c) The forces necessary for the security of our naval and air bases abroad.

Alternative A.—In addition to the above, the first alternative provides for a two-power standard Navy so that we can have security on the sea in home waters and abroad. The cost of this Navy would probably be so great that we should have to be content with a moderate sized Air Force and a small field force made out of draft finding units. For defence against enemy air attack, we should be largely dependent on allies. Even if we succeeded in gaining security in this way, the task of bringing pressure to bear on the enemy, to force him to accept our terms would still remain. The Navy could only do so by economic pressure which would probably take over a year to become effective. In the meantime, we could build up land and air forces, but this would also take at least a year. We therefore see that this alternative can only give security with considerable assistance from our allies and most certainly entails a long war.

Alternative B.—The next alternative is to be content with fewer capital ships so that we have security on our maritime communications abroad, but not necessarily in home waters. The great financial saving involved in a reduction of capital ships being used to enable us to have a very powerful Air Force. This force should be far more powerful than that of any enemy power. For security at sea in home waters, we should have to trust to the Air Force, and this would naturally have to be tested and proved as far as it is possible

to do so in peace before it could be accepted. The field forces of the Army would be kept to a bare minimum in financial cost so that, by economy on the Navy and Army, the Air Forces could be maintained at a two- or perhaps even a three-power standard. If this could be achieved, our security would be assured. No nation will initiate air attacks if retaliation will take the form of wholesale destruction of her towns. If we could possess such an Air Force, the risk of war would be reduced to a minimum. In the event of war, this force would have to be kept in reserve in the early stages as a threat for retaliation in case the enemy initiated air attacks on civilian centres, but at a later date—when we had made preparations to withstand air attacks for a limited period—it could be used as an offensive measure to force our will on the enemy. We thus see that if we can build up an immense Air Force at the cost of the Army, and only retain the minimum Naval forces, we may achieve the maximum degree of security and also of offensive power to force our will on the enemy. It would, however, appear to be doubtful if we could afford an Air Force of this size, and it is also doubtful if a potential enemy would allow us to build up an ascendancy of this nature in the air arm.

Alternative C.—The third alternative must, therefore, be considered. In this case the proposal is to have a Navy of fair proportions, though less than a two-power standard, and depending on assistance from the Air Force in certain events for at any rate some of its duties in home waters. The Air Force to be very strong in fighter aircraft for home defence and to have a powerful striking arm but without aiming at an overwhelming strength as suggested in the previous paragraph. A sufficient proportion of the financial resources would then be left to enable us to build up a really effective field force, which would form the main portion of the mobile offensive troops of the allies against the aggressor on land. By using this alternative, we would achieve a very fair degree of security at sea. We would not be very secure against air attack in the initial stages and would have to make definite plans to be able to hold out in spite of very heavy enemy air attacks during the first few weeks. After that, our plans should enable us to initiate a successful offensive into the enemy territory with the allied land and air forces. This would aim in the first place at drawing off enemy air attacks from our country, and would later become the

means of forcing our will on the enemy without having to wait for perhaps two or three years, until exhaustion and economic pressure forced him to accept our terms.

A deep and detailed study would have to be made before any of these alternatives could be selected as the soundest policy. The first alternative is our traditional policy of putting our money in the Navy, but may be accused of minimising the power of the air. The second may be slightly futurist in putting undue weight on the air arm, but is probably the eventual solution. The third alternative approaches more nearly to our present policy and is likely to find most support at the moment. But, although this alternative approaches our present policy, far-reaching changes would be needed in our forces to make them effective within this policy. The changes would entail the provision of a really efficient Field Force in the Army quite unlike our present proposals for patched-up 1918 divisions. The taking over of at any rate some of the duties of the Navy in home waters by the Air Force would also be entailed.

So far we have been giving some general conclusions as regards the types of defence forces which we need for meeting a European war, which holds our greatest danger. Before it is possible to study these forces in any more detail, it is necessary to consider our commitments in other parts of the Empire, for this may affect the size and shape of these forces. In brief notes of this nature it is only possible to do so in a very superficial manner, which may not be of great value. Nevertheless, a few notes are attached with this in view, and particularly as regards the form which our land forces should take, if we are to be successful in the prosecution of a European war based on this third alternative.

PART II

THE DEFENCE OF THE BRITISH EMPIRE ABROAD

It is the duty of our Naval forces to guard the maritime communications on our trade routes and deny them to the enemy. For this reason it has always been considered that the Navy should possess a total of seventy cruisers. It may be that in the future our Air Forces, stationed in our Dominions or foreign possessions, will be able to render considerable assistance to these cruisers in at any

rate some of their duties. This may make it possible to effect a reduction in the number of cruisers necessary for this purpose. This, however, is for the future. It must be remembered that aircraft cannot search ships and cannot operate under all conditions. Whereas aircraft may be just what the enemy needs to interfere with our control of maritime communications, it does not follow that aircraft will enable us to render them secure. Cruisers will therefore obviously be necessary in considerable numbers for this naval role. But when we come to consider the capital ship, which is necessary at times to support the cruisers, we are on more difficult ground. So long as enemy countries abroad possess fleets of capital ships we are forced to do likewise; but when an enemy with weak naval forces uses an odd capital ship to threaten our cruisers which are protecting our communications, it is not necessarily the only answer to say that we must use capital ships to meet this threat. Capital ships can withstand air bombs and torpedoes to a considerable degree, but every blow must do some damage. When we have Air Forces stationed in most of our foreign possessions, it may be that their action, coupled with that of light surface craft, may prove a great threat to small numbers of enemy capital ships, which are operating a long way from their bases. It may pay us to depend on this form of protection rather than to count on dispersing our capital ships to meet such a threat.

When we come to maritime communications in restricted waters like the Mediterranean, the Air Force is predominant. When Germany has absorbed Austria she will be on the Mediterranean from an air point of view. A comparatively small increase on the present performance of aircraft would then give Germany a large measure of air control over the Mediterranean. It is possible that in future special anti-aircraft ships may, to some extent, offset the advantages of aircraft over restricted waters. Failing some solution of this nature, it would appear that unless we possess powerful air forces we shall definitely lose control over maritime communications which are flanked by enemy land-based aircraft, such as those in the Mediterranean.

We therefore see the ever-increasing importance of air forces in connection with the security of sea communications. They are essential as a counter to enemy air forces in restricted waters, and they may in the future become the main support to cruisers that are threatened by more powerful enemy ships.

As regards naval bases, it is the duty of our land and air forces to guard our foreign possessions, including our naval bases and fuelling stations, on which the security of the Navy depends. The most important aspect of this defence work is security against external aggression, but the work also includes internal security and we will consider the latter first. Air forces are practically useless for this purpose, and modern mechanised forces are of less value than infantry, for they have fewer men in the unit. It is numbers of men that are needed for this work and although mechanised forces can dismount and carry out the work perfectly well, they lack the necessary numbers, for large-scale disturbances. If it comes to open rebellion, mechanised forces are just what are required, but the normal work on internal security is not to quell rebellion. We therefore see that an important duty of the land forces is best fulfilled by troops of the exactly opposite type to which we wish to use in war. This is a serious handicap, but it is not unsoluble. Internal security work can be divided into that which is permanently required, such as the greater part of this work in India, and that which only arises on occasions, of which there are many examples in other parts of the Empire. Where forces are certain to be needed, all the time in peace and war to ensure internal security, then those forces should not be soldiers. It is an obvious waste to use highly trained and well-equipped regular troops for this work; if used for this purpose they provide no reserve for war because they must continue on these duties in war. This is considered in more detail in Section III of these notes, and it will be seen that by eliminating permanent police duties (though accepting police work for internal security in emergencies), it is possible for us to maintain forces of a type which is far more efficient for modern war than what we possess at present. This involves no increase in expense and would probably lead to economy, for police forces are cheaper than fully trained, well-equipped military forces.

Turning to the duty of the land and air forces in resisting external aggression, we see at once the ever-increasing value of the air. Many of our naval bases would be defenceless without air forces to protect them, and would be rendered valueless to the Navy by enemy air bombardment. When we consider land operations for the protection of countries such as India and Egypt, we again find the air becoming the predominant arm. And yet, when we examine the land and air forces available abroad to resist external aggression, we

find a great deficiency in air forces. There are, for instance, only eight squadrons of R.A.F. in India compared to land forces, which are the equivalent in strength to about ten divisions. If the air forces abroad are to be built up to the necessary strength to give us security, they must be employed for all the duties which they can carry out. At present we use large numbers of soldiers for many duties, such as covering troops on the North-West Frontier of India and for coast defences. It may be that this is the best and safest means of carrying out these duties, but it means considerable expense. If this expenditure prevents us from maintaining sufficient air forces abroad, then some cheaper method may have to be employed. It is probable that considerable financial expenditure could be saved by using more air forces and fewer men on the North-West Frontier. This would be a direct step to building up our air forces in India. It might involve a certain element of risk, but this risk might be less than the certain danger of having insufficient air forces in India. We should welcome and encourage every possibility of using air forces where at present we use men on the ground instead of discouraging and objecting to such proposals as we are so inclined to do at present.

In Part I of these notes we saw the increasing importance of the air for home defence. We have now seen the ever-increasing importance of the air, both in naval warfare for securing our maritime communications and in land warfare for the security of our foreign possessions and naval bases. Does this not point to the air as the service on which we shall in the future have to spend the greater part of our resources? In the past we concentrated on the Navy and starved the Army and we were right to do so. It is fatal to divide the resources at all equally if the strength of one service is the more vital necessity. Shall we be prepared in the future to starve the Navy and the Army to provide a very powerful Air Force? It would take years of propaganda and discussion before such an act could be accomplished. If it is likely to become necessary we should think and talk in that direction to-day.

At present, the advent of powerful military air forces appears to have put us in a disadvantageous position; but if we look ahead to the day when our Air Force is our premier service on which we spend the greater part of our resources, the position appears less unfavourable. We are already better placed than any other nation to establish world-wide air communications which we can render

secure. At present there are gaps due to the limited radius of action of aircraft, but this is already beginning to disappear. Our Dominions are taking to the air more rapidly than we are, and will certainly possess strong air forces in the future. What will then be our position as regards the defence of the Empire? At present, if we have trouble in Europe we can receive little support from the remainder of the Empire for months or possibly even for a year. When our military strength is in the air, the concentration of our strength to meet a threat—wherever it may be—is likely in the future to take days, or at the most a week, compared with the months that must elapse at present. In the past we secured our Empire by controlling maritime communications and put nearly all our resources into the Navy. In the future, the maritime communications will be equally important, but our main military strength is likely to lie in air forces and air communications. The air being the decisive arm, we will require cruisers to work with it for the control of the sea and mobile land forces to work with it for the control of the land.

PART III

THE BRITISH LAND FORCES

We have considered the types of defence forces that we require both for home defence and for the defence of the Empire abroad. We can now turn to examine a little more closely the land forces that we need at present for both purposes. We will start by considering a European war. If our land forces and those of our allies are to take their part, in combination with air forces, in forcing the enemy to withdraw air attacks from vital areas in this country and in bringing the necessary pressure to bear on the enemy to enforce our will, then the allies must possess land forces of the following nature:—

- (a) Mobile troops for offensive operations—say ten mobile divisions.*
- (b) Combat troops for following up the mobile troops and holding defensive positions or attacking fortifications—say sixty to seventy normal divisions.
- (c) Siege weapons to enable the combat troops—when necessary—

*-These are now called Armoured Divisions.

to break through strong defences, and open the way for the mobile troops.

These suggestions for the strength of the forces necessary for the allies are merely an indication of the degree of strength required, and are in no way the result of a detailed study of the problem. They are also only an indication of the initial force required, and reserve troops would naturally become necessary to support them.

From the point of view of Great Britain, certain points are at once apparent. First of all, it is clear that the difficult task of the mobile troops needs the highest training and will more easily be fulfilled by regular troops such as ours. Moreover, a regular army is very expensive compared with a conscript army and the additional capital cost of expensive vehicles bears a far smaller proportion of the total cost in a regular army compared with a conscript army. Then again, the mobile troops for offensive operations are the vital troops on whom the whole success of war depends. If Great Britain possesses a large share of these troops she will hold a predominating position in the balance of power in Europe. Finally, it is unlikely at present that any of our Dominions will maintain troops that are immediately available for war, so that any mobile troops that are to take part in offensive operations in the early stages of the war must be provided by Great Britain.

From the above, it is clear that everything points to the advantage of our providing as large a share as possible of the mobile troops which are needed by the allies.

There is little doubt that the age-old policy of having two types of troops will be unaffected by the introduction of mechanical warfare. There have always been the mobile troops whose duty it was to feel out for the enemy, hamper his movements, find and hit his flanks or rear and carry out the pursuit. These troops were light cavalry in the past and are now mobile divisions. Then there were the slower moving, harder hitting troops (combat troops) used for attacking strong defences and for defensive purposes. These have always been infantry and they were often supported in the past by heavy cavalry. It is now clear that we need the more lightly armoured and faster tanks and fighting machines for the mobile division to work as light cavalry, and the more heavily armoured but slower tanks to support the infantry as heavy cavalry. We are not sure at present exactly what we require as tanks and fighting machines for our mobile division. It may well be that we shall be

forced by financial limitations to make use of large numbers of smaller and simpler tanks and fighting vehicles to start with and changing to faster and larger tanks of medium weight as the fear of war begins to loosen the purse strings. These points will sort themselves out as we progress, but it is certain that we shall want heavy tanks with thick armour and powerful guns to work with the infantry in the close and heavy fighting.

Although we are agreed that a war of this nature provides our greatest danger, and that our forces must be primarily designed to meet this danger, we still have many commitments to meet abroad. If the forces which we need for a European war can also be used to meet some of these commitments, it will naturally be a great advantage. We must therefore first consider these commitments.

A consideration of the duties of our land forces abroad falls conveniently into—

- (a) The defence of India.
- (b) The defence of Egypt and the Middle East.
- (c) The defence of other possessions and naval bases and fuelling stations.

We will consider these in turn. The defence of our Dominions has not been specifically included because this depends mainly on the denial to the enemy of the security of his communications by sea. Also, each Dominion is initially responsible for its own defence on land.

The Defence of India

A point of primary importance in the defence of India is the fact that India employs forty-nine infantry battalions (twenty-six of whom are British troops) for internal security and guarding the essential lines of communication in India. This duty is simple police work. The troops employed in this way are not a reserve for war, for their work on internal security is even more essential in war than in peace. The equipment and training of these troops is far beyond that necessary for police duties, and when we realise that the troops which are employed at this permanent police work are regulars, who would make the finest mobile troops for war, we can see at once the degree of waste and inefficiency that this system involves. A mixed British and Indian police force could replace these troops at far less cost

The troops maintained in India for war consist of a field force and the covering troops for the North-West Frontier. We will take the latter first. These consist of five Indian cavalry regiments and forty-two infantry battalions (five British battalions). More responsibility could be entrusted to the Air Force on the Frontier and this will no doubt come about in due course. In the meantime, the five British battalions employed in this work could probably be replaced without loss of efficiency by Indian troops.

Turning to the Field Army we find that this consists of:—

Four cavalry brigades (four British regiments);

Four divisions (including a total of twelve British battalions);

Eight A.C. squadrons R.A.F. (partly employed with covering troops).

In addition, there is a microscopic tank force of three light tank companies.

The field force may be called on to reinforce the covering troops or the internal security troops in the case of necessity. Its main duty, however, is to advance against any enemy and resist aggression. This duty may be of a comparatively minor nature or it may mean an advance to secure the communications and passes over any part of the frontier and thus pave the way for Imperial troops in a major war. This work is real war and differs little from European warfare. We therefore again find a necessity for both mobile and combat troops.

The mobile troops are limited to four cavalry brigades and they can hardly be classed as mobile troops in modern warfare. The remainder of the field force consists entirely of combat troops. We thus find the force quite unbalanced, and the operations are stultified at every turn.

If we wish to change the nature of a portion of the troops in the field force we are at once met by the answer that modern mobile troops are unsuitable for reinforcing the covering troops, and owing to their lack of man-power they are not very suitable to use in emergency for internal security work. In addition, India is faced with the necessity of sending a total of two brigades of combat troops to Persia or Singapore if necessary. We must therefore allow for all these requirements in any organisation which we suggest.

In view of the modern power of the air for dealing with large-scale tribal risings, it is very unlikely that more than one division

could possibly be needed as a reinforcement for the covering troops. At the same time, we have the commitments of two brigades for duty outside India. It would therefore appear reasonable to suggest that two divisions of the field force should be sufficient as combat troops, but to allow for reserves and emergencies we will retain three divisions in their present form.

This leaves us with the following troops which are "spare" and can be converted into any form that we desire:—

One division;

Five cavalry brigades (leaving one for divisional cavalry);

Ten cavalry regiments (withdrawn from L. of C. troops);

Five British battalions (withdrawn from covering troops in exchange for Indian troops).

It is not possible in these notes to enter into financial statistics, but it is certain that the funds expended on these forces would provide a useful proportion of modern mobile troops which are so badly needed in India. Also, mobile troops need powerful air support and as India only possesses very limited air forces, a portion of these funds could be used to increase the air arm in India. It is possible that the funds expended on these forces would be sufficient to maintain:—

One modern mobile division (British Service);

Four squadrons R.A.F.;

A proportion of siege weapons to assist the combat troops when necessary.

We would thus have a field force consisting of one modern mobile division and three divisions of combat troops; and the former would be supported by suitable air forces. Who can doubt that this would not be far more efficient than our present field force in India?

Officers who have served long years in India have very conservative ideas and will shudder at these views. But even if they will not accede to the above modest proposals and insist on the necessity to retain all four of the old-fashioned divisions as combat troops, this still leaves twenty cavalry regiments which can be converted into modern mobile troops. Even this would be better than the almost total lack of progress which has shadowed India since the war. It has taken us ten years longer than any other European power to mechanise our cavalry; it looks as though it will

take twenty years or more before any move is made in this direction in India.*

The Defence of Egypt and our Foreign Possessions

We can now turn to consider the defence of Egypt. We have already seen the increasing importance of air forces in the Middle East. The air is the predominant power in that region. Nevertheless, we still need mobile troops to work in co-operation with the air and combat troops for security purposes. Cavalry have existed in Egypt ever since the Great War. The necessity for their replacement by modern mobile troops has been obvious to all thinking soldiers for the last ten years. These views have been consistently opposed by some officers during all this time. Yet as soon as the threat of war with Italy appeared, the same officers were the first to press for a conversion of the cavalry units to motorised mobile troops. The deed is at long last completed and Egypt is to have a mobile force. Although it is beyond the present proposals, it is suggested that we should put down one mobile division as the garrison for Egypt. At times these mobile troops would have to undertake police duties in Cairo; they can perfectly well do this as an emergency. At other times they may have to hold defensive positions on the Egyptian frontiers. This again they can do, if necessary, but their chief value would lie in their mobility and hitting power. The Egyptian forces should be used to fulfil the needs of combat troops for such purposes as internal security and the holding of frontier positions. There seems little doubt that the British share of the defence of Egypt should be the provision of a mobile division. This would also be a most useful reserve for other Middle East commitments.

We are now left with the problem of the forces necessary for the defence of our remaining foreign possessions and our naval ports. For this purpose we need infantry battalions and attached troops roughly as follows:—

Gibraltar	..	..	..	2 battalions
Malta	..	..	..	4 battalions
Sudan	..	..	..	2 battalions
West Indies	..	..	..	1 battalion (might be replaced by gendarmerie)
Singapore and China	..	..	..	6 battalions
Total	..	..	..	15 battalions

* It should be remembered that this paper was written in 1935.

We thus see that our total forces abroad, including India, consist of—

Two modern mobile divisions (one in India and one in Egypt);
Twenty-four infantry battalions, with corresponding troops of other arms. This is equivalent to two divisions.

Our Home Forces

Now that we know our requirements abroad we can shape our home forces more easily. There are many people who abuse the Cardwell system as the cause of all retrogression, whereas the real cause is conservatism. It is, of course, an excellent system for troops at home to have corresponding forces abroad and to interchange with them, and this can quite well be arranged so long as we eliminate permanent police duties from the work of the Army. Having taken a clear sheet on which to work out our requirements abroad, we must do the same at home. At present there is waste in many directions. If we used a clean sheet and eliminated everything that was unnecessary it would probably be found that we could have the following without increasing the present financial expenditure:—

- (a) Two divisions. These would balance the troops on foreign service.
- (b) Four modern mobile divisions. Two of these would balance troops on foreign service and the remaining two would also take their turn on foreign tours where the training would probably be better than at home.
- (c) The necessary siege weapons (with the troops to man them) to enable the two divisions to break through strong defences when necessary.

It may be argued that our field force at home is unbalanced and possesses too large a share of mobile troops. This is a fair criticism, but it is the highly trained regular mobile forces that our allies will need and not masses of men. In the initial stages in a European war we shall be partly dependent on our allies for defensive troops even on our own part of the theatre of battle, but this can be arranged for. No continental ally will grudge giving us a couple of line holding divisions for defensive operations. After the initial stages, territorial forces will become available and their scanty peace-time training will be quite sufficient for line holding duties.

We therefore see our home forces being used as follows in a European war:—

- (a) Our mobile forces (four divisions) being used for offensive operations (in co-operation with our allies), following up close behind heavy air bombardments and making full use of the disorganisation caused by the latter to the enemy forces and communications.
- (b) Combat troops (two divisions), following up the mobile troops in co-operation with allied divisions to secure the ground gained by the mobile troops. These two divisions of combat troops to be specially trained in piercing strong defences assisted by the necessary siege weapons (these siege weapons will be mainly heavy tanks and artillery).
- (c) The territorial forces to provide our deficiency in combat troops at the earliest possible moment. They must later provide a proportion of both mobile and combat troops.

We see our land forces abroad being used as follows:—

- (a) A mobile division in India is used to advance across the the frontier wherever we are threatened, and pave the way for an advance by Imperial forces.
- (b) Combat troops (three divisions) in India are used to follow up the mobile troops and also as a reserve to support covering troops or for internal security purposes.
- (c) A mobile division in Egypt is used to ensure the security of that country and to deal with any troubles in the Middle East. The Egyptians to provide the combat troops for Egypt.
- (d) Combat troops (total two divisions, including the British services combat troops in India) to secure our remaining possessions and naval bases or ports abroad.

In order to attain this result we must solve these three problems:—

- (a) What shape should our modern mobile forces take? What type of tank or fighting vehicle do they need?
- (b) What siege weapons do we need to enable normal formations to pierce through strong defences, and thus pave the way for the mobile troops? What types of heavy infantry tanks and artillery do we need to break through these defences?
- (c) In order to provide two combat divisions and four (or more) mobile divisions, we must take a clean sheet of paper and clear

our views as to what we really need. All unessential establishments must be removed. There are now no surplus funds available for horse coping establishments, unnecessary remount departments, railway training centres, etc. If we cut away the dead wood we will have plenty of funds for modern forces in reasonable numbers.

Our Future Defence Forces

Having examined in the above notes the views of some of the "younger generation" in 1935 about our needs in defence forces from all three services, we can now see how these matters panned out. Rather naturally we adopted "Alternative C" as a safe middle course. Our Navy never reached a two-power standard in time for the Second World War and this was the basic cause of our disasters in the Far East. Our Air Force developed surprisingly well considering all their difficulties and led the world in many ways. They had not, however, reached any substantial size when the war broke out. We were woefully short of air forces in the Far East, and this went hand in hand with our naval difficulties in the cause of our failures in those early days.

As regards the Army, very little progress was made in India before the Second World War, but the War Office at home went ahead very fast in thoughts and ideas. This is described in some detail in Chapter 8 under the title "The Revival of the Art of War." The Army was, however, so starved of all financial resources till such a late hour that we had practically nothing available in the way of armoured forces on the outbreak of war. The War Office did not always move quite so far and fast as the "younger generation" proposed, but the fact remains that our plans and proposals for armoured warfare were generally ahead of those of other nations, but the funds were not available to translate them into armoured units.

Even if we could only have reached the limited proposals made in this chapter the effect on the course of the war might have been considerable. The addition of four highly trained British armoured divisions to the French armoured forces would have given us the means of dealing effectively with the break through of the German armoured forces north of the Somme in 1940. We would certainly have cut across their line of advance and they might easily have

suffered a serious reverse. Who could say what might then have happened? The French line might have held. Much might then have been done. The men of France were as brave as ever, only the leaders were bad. If the Germans had been held new leaders might have arisen. The powers of recovery of French forces are remarkable. A considerable breathing-space would certainly have been won with the help of our rapidly increasing air and armoured forces. But our political leaders had rendered this impossible. Pray God that such a thing may never happen again.

All this has been in the strain of reminiscence. What line should be taken in the future? For several years after the war we shall have to retain armies of occupation. These will be needed in Germany and for some time in Burma and the Far East. Conscription will have to continue on the present lines to maintain these armies. They will of course be gradually decreased and normal conditions should prevail after a few years. Let us try and gather some ideas as to what defence forces we will need at that stage. We have already agreed that it is too soon to make concrete suggestions. No one can say what the future holds in store for us. If rapid progress is made in world federation we shall be allotted the task of the "police" forces for world security. It seems much more likely, however, that we will have to prepare our national defence plans and put them into effect before any agreement is reached on an international military police organisation.

The two outstanding and new features of this World War are the flying bomb or rocket and air-borne troops. Let us discuss these two new weapons.

The Rocket

Rocket artillery was used in a crude form in the very early days of gunnery, but Sir Hugh Elles, who was Master-General of the Ordnance in 1935, was convinced that it could be developed in various new forms to play a great part in modern war. It is not generally known that we took a leading part in this new work of development, and General Elles had some difficulty at the time in bringing the artillery side to believe in this idea.

The first stage in this development was to use rocket artillery for anti-aircraft work. Both the rockets themselves and the launching gear were extremely simple and could be mass produced in very

great numbers. This was a very important point just before the Second World War, when we were so lamentably behind in the provision of weapons. Moreover, anti-aircraft gunnery was not very developed in those days and the best chance of hitting an aeroplane seemed to be to burst a large number of shells round the aeroplane rather than trying to hit accurately with individual shells.

After that the Russians went ahead with rocket artillery for land warfare. Here again ease of production was an important consideration, but in addition the moral effect of rockets is very great. The reason for this is that a large percentage of the weight of a rocket consists of high explosive as only a thin steel casing is needed. The explosion of the rocket is therefore very violent and effective. A shell, on the other hand, must have a strong enough casing to stand the shock of discharge, and consequently the proportion of high explosive which can be used is much less. Rocket fire is therefore much more frightening than shell fire, especially as a considerable area is smothered in one salvo when using multiple rockets. The Germans and the other allies used rockets to a limited extent, but not in such numbers as the Russians. It is quite possible that a large part of the artillery in land warfare will be equipped with rockets in the future. The Russians also led the way in the use of rockets fired from aircraft. Very great effect was produced when our tactical air forces started using rockets against troops, tanks and transport, and this became one of the decisive weapons of the war.

The next appearance of rockets was in the V.2 weapons fired at us by the Germans. If they had developed this at an earlier date a very serious and difficult position would have arisen for the Allies. This weapon has made strategical bombing—not obsolete—but certainly obsolescent. In future these rocket bombs may well be directed by wireless waves and prove to be one of the most decisive weapons in history. As it is it has completely altered the aspect of European warfare. When countries are so close together as they are in Europe it becomes pointless to keep great armies for defence when the enemy can destroy all your towns by means of rockets without a single soldier setting a foot across the frontier. Under such conditions warfare in Europe will become as silly as the feudal wars of seven hundred years ago. The countries in and round Europe will be forced into some form of federation, whether they like it or not, unless they all want to commit suicide.

The rocket may have an equally great effect on future naval

warfare. At present we have large battleships carrying perhaps eight 16-inch guns and costing many millions of pounds. Quite a simple rocket can, however, be even more effective than a 16-inch shell. Launching ways for many more than eight such rockets at a time could be fitted on a much smaller ship than is needed to carry eight 16-inch guns. Shall we see the battleship of the future taking a much smaller and simpler form and using rockets instead of guns? A number of such ships would be a less dangerous target from the air than the present enormous battleship.

Whatever form the future may take, the rocket will certainly play a very large part in every form of warfare.

Air-borne Troops

Air-borne troops were only in an early stage of development in this war, but in spite of that they produced a great tactical effect on the fighting at various stages of the war.

The idea of using air-borne troops dates back a long way. Between the two World Wars our ideas were mainly focussed on warfare in undeveloped countries, such as might occur in the defence of India. The younger and more progressive officers hatched many schemes in 1930 for carrying out these operations by the combined use of air-borne and armoured forces. These proposals did not, however, receive much support, though they certainly foreshadowed the type of operations which we have seen recently in Burma, where the armoured and air forces have worked so successfully together.

The first large-scale trials with air-borne forces were carried out by the Russians. In 1936 I saw them drop a whole infantry brigade from the air at their manoeuvres near Minsk. The men were sitting on the wings of the aircraft and slipped off at the appointed place, ripping open their parachutes as they fell. The jump was made from a height of 1,000 feet. The officers commanding the infantry battalions made a "delayed" drop and did not pull the rip-cord till they were half-way down, so that they landed first. The result was most spectacular, and seemed very successful, but many improvements were obviously needed. The men dropped over a very wide area and took over an hour to collect together. Then the technique for dropping the supporting weapons had not yet progressed very far, and the infantry had little more than rifles and machine guns to fight with.

Unfortunately air-borne forces require 'an immense number of aircraft to produce much result. The Russians were always short of equipment and although they were the pioneers in practical trials they fell behind in the later developments. All the modern methods of dropping from a low height so that the troops will not be unduly scattered and the use of gliders to carry men and equipment were developed by ourselves and other nations.

Little use was made of air-borne troops in the Second World War until the North African campaign towards the end of 1942. There we dropped or landed parties of air-borne forces between Oran and Algiers to assist our troops in the landing on the beaches. It turned out that this assistance was unnecessary. As soon as the operations had started the Germans sent strong air-borne forces to land on the aerodromes near Tunis. Instead of using them behind the beaches it would have been of the greatest value if we had sent our air-borne forces to capture these airfields and thus prevent this action by the enemy. We might then have seized Tunis in 1942. This, however, is being wise after the event.

Air-borne forces were used by ourselves and America with great skill and success to land behind the enemy and thus assist our landings in Normandy. They were again used in much the same way when we crossed the Rhine. The most important point in the use of these forces is that they must be relieved or supported by the troops which advance on the ground within a limited time. Air-borne forces cannot at present take with them sufficient supplies and ammunition or supporting weapons to fight for more than a limited time. After they have landed the enemy knows their position and it then becomes very difficult to reinforce them or to send additional supplies. After considerable initial success, the eventual failure at Arnhem was due to this cause.

In the future there will certainly be great developments in the technique of using air-borne forces. It is well to remember that the success of great campaigns has usually depended on the use that was made of the mobile forces. We have seen the vital results achieved by the correct use of armoured divisions in the Second World War. These are the light cavalry of bygone days. Some people think that air-borne forces will be the main mobile troops in future wars. We must, however, remember certain limitations possessed by these troops, even though future technical developments may remove these handicaps. The aim in war has always been to

get round the flank and behind the enemy. This could be done in the past by cavalry and to-day by armoured divisions. It can be done much more easily by air-borne troops. But if cavalry or armoured divisions become involved in a difficult situation while carrying out this rôle they can use their mobility to break off the engagement quite quickly and easily and move elsewhere. It is essential for mobile troops to be able to strike in and out like the use of a rapier. This cannot at present be done by air-borne troops. After they have landed their mobility has gone, and they are tied to operations in that area. Herein lies the main problem for the future of these troops. It will be interesting to see the technical developments that will be made to solve this problem of maintaining the mobility of air-borne forces.

These new developments will have a considerable effect on our plans for home defence. Europe as a whole may have to defend itself, but not the British Isles. We would, of course, have to raise and maintain our proportion of the necessary forces for the internal and external security of Europe. Our share for this purpose should be mainly naval and air forces, but it is impossible at present even to guess at the size of the forces that we would require for this purpose.

We still have to study the problem of the defence of our Empire as a whole, including our foreign possessions. In Chapter 2 we considered that the principles for the defence of our Empire would not need any great change in spite of these new developments in weapons. This is probably true, but it is very hard to know what sized forces we will need. Who will be our potential enemies after the Second World War? What armed forces will they have at their disposal? How can anyone guess the answers to these questions? There are, however, certain assumptions which seem fairly safe.


The value of air forces for the defence of our Empire overseas and for our foreign possessions is likely to increase very rapidly in the future. A considerable part of the work for which the Navy is responsible will be carried out by naval air forces. The main feature of our defence will continue to lie in the security of our maritime and air communications. Of course the defence of our naval and air bases will remain as important as ever. For this purpose we will need a small but highly trained regular army. Regular troops will also be needed for mobile striking forces in the Middle East and India. In fact it seems likely that our army requirements will be

similar to those which were suggested in the earlier part of this chapter, but they should include highly trained air-borne troops.

What it comes to is that we shall need first-class naval and air forces to secure our communications all over the world and take our share in securing peace for Europe. These forces working together will provide our first line of defence. The whole security of our Empire will depend on them. The defence of their vital naval and air bases will be carried out by the Army, but this will only be possible so long as we retain control of the communications. At places where we have commitments for land warfare such as in the Middle East we will have to retain small but highly trained regular soldiers. England will be the depot to supply these troops and will have to maintain a highly mobile striking force for use in emergency in Europe, or wherever it is needed.

As regards conscription we all saw that a large proportion of the young men of this country benefited very greatly from the good food and physical exercise which they received when they were called up. They increased rapidly in weight and strength and general fitness. They also acquired a grand team spirit and became conscious of their duty of service for their country. These are great attributes. There is a strong feeling that all young men should carry out a short training period for one of the services after this war. With our falling birth-rate the numbers will be limited and the Navy and Air Force would require a large share. Those that were allotted to the Army could have useful training in addition to that of physical and mental fitness. A very large part of the men in a modern mobile army have to learn some trade and that is what the young men would learn during their training. We are all agreed that we shall need a small but highly trained and mobile regular army after this war. If this form of compulsory service is approved we shall be able to back up our regular army with a citizen force that has at least learnt the rudiments of the work. This would be in addition to the territorial army, or the two might be amalgamated to some extent. We should, however, keep it clearly in our minds that our future needs as a world power lie in the possession of first-class naval and air forces, backed up by a small but highly skilled and mobile army. The fighting men in our Empire are limited to the white races and a very small proportion of the men in India and certain negroes. The majority of the people in India belong to the non-fighting classes and would never take up arms or would be quite useless in

that profession. We have not, therefore, the man-power to provide great land forces; nor do we need them. We are fortunate as an Empire in having very few land frontiers. In normal times our regular army is constantly employed in quelling local disorders or tribal risings. At times it takes part in minor wars. The very best trained and equipped troops are needed for these duties or much inefficiency and unnecessary expenditure results. This nucleus of our army is also needed as a model and to find the instructors to train new armies for war. These again must become highly trained and equipped. We can only find a very small proportion of the land forces engaged in a great war and our share must be to provide the mobile and armoured forces more than line holding troops. In this Second World War we have carried out more than our share in the war effort. This has been concentrated mainly on the Navy and the Mercantile Marine, the Air Force and munition supply. Our Army has necessarily remained very small, though it has reached a very high standard of efficiency and carried out much vital work. This is the line for us to follow in the future.



How Shall We Choose Our Leaders?

OUR MILITARY LEADERS

NOTHING is more important in this world than leadership. It applies equally to political and military work, and we will start by discussing military leadership. In normal times the Army has not usually been held in very high esteem in this country and this had naturally reflected on the leaders. The Second World War has done much to rectify this matter. No one will deny that our leadership in the war rose to a very high level in all three services. There were, however, some sad failures in the Army during the early part of the war, and the leadership has not reached a high level between our wars. Let us therefore examine Army leadership, starting from the First World War. The lessons may be applicable to the other services as well.

Military leadership in the highest places reached a very high mark in the First World War. Few of us realised this at the time and even fewer appreciate this fact to-day. Yet it is undoubtedly true. Quite early on in the war the Commander-in-Chief in the Field, Field-Marshal Haig, and the Chief of the Imperial General Staff at home, Field-Marshal Robertson, worked out their ideas on how to win the war. We were faced with siege warfare along the whole front in France. Many proposals had therefore been made to find an "easy way round." An advance through Salonica was much favoured in some circles. This would have been very unsound for a detailed but very practical reason. During that war we had nothing but solid tyre lorries. They would have been quite incapable of negotiating the country tracks in the Balkans. The Commander-in-Chief in France and the C.I.G.S. at the War Office went fully into all these matters. They decided that it would be most unsound to divert any large forces for operations through the Balkans due

mainly to these supply difficulties. They were undoubtedly right. The position would be quite different to-day. Our four-wheel-drive lorries on large pneumatic tyres can go almost anywhere. We could well have launched strong columns through the Balkans if we had wished to do so in this war.

As it was, these great leaders made up their minds that the war had to be won in France. They were highly criticised. The Prime Minister and Mr. Winston Churchill were both in favour of this "easy way round." They were against "butting our heads against the fortresses in France." Such was the strength of character, however, of Douglas Haig and Robertson that they had their way. The war was won in four years. It might well have run into six years, like this war, if we had not possessed those two great men.

On the other hand, the leadership on a lower sphere was not so good. This was partly due to the fact that the war coincided with a period when the Art of War was very low. The power of the defence was overwhelmingly strong compared to the attack, until the arrival of the tank. Even then it must be admitted that there was lack of vision and leadership within the armies. At the same time, the leadership was of a sufficiently high standard to enable the Army to stand unparalleled casualties without undue loss of morale. Whilst other armies suffered outbreaks of mutiny, there was never any sign of disaffection in our Army even under the most terrible conditions. It must also be remembered that it was the British plan for the assumption of the offensive in August 1918 that was accepted and which led to the defeat of the German armies in that year. Even to this day few people appreciate the courage that was needed to initiate this counter-offensive. All the great offensives which we had previously launched had failed in the end and the British Army had not yet recovered from the severe handling which it had received in the German attacks of March 1918. This was the moment when Douglas Haig again assumed the offensive which resulted in the downfall of the German Empire. This was an outstanding example of military leadership.

Turning to the period between the two world wars the question of leadership is more difficult to answer. A good deal of criticism has been made about the Army in this period. This is as it should be for we learn by studying our mistakes, but we shall see presently that leadership on the political side is even more open to criticism. This is not always apparent, for the public is more forbearing over

political than military leadership. The reason is not far to seek. The country chooses its political leaders, or at any rate it is under the impression that it does, but the military leaders are appointed by the Government and the people are inevitably excluded from any question of choice. Adverse criticism is therefore more to be expected.

When considering the leadership of the fighting services between the two world wars and the progress made—which of course depends mainly on leadership—it is necessary to appreciate the parsimonious financial treatment which they received for the greater part of this period. The Navy always obtained a modicum of money, though not nearly enough for our proper security. The Air Force started on a small scale but received a continually expanding amount until 1934, when the Air Force rearmament and expansion programme was started and they received all they wanted. The Army was exposed to increasingly severe financial restrictions in post-war years until it could really hardly function at all, and the Army rearmament programme was not launched until 1936.

These restrictions naturally had a very damping effect on the leadership of the fighting services. It is very hard under such circumstances to plan quietly and carefully for the day when the purse strings will again be loosened. It seems so unlikely at the time that this will ever happen again that almost everyone is discouraged. It is true that our leadership was not really equal to this strain as a whole, but much good work was achieved and the resuscitation of the military forces was not unduly delayed when the funds again became available to rebuild and equip the forces. Many a government department would have passed less successfully through this long period of depressing strain.

How to Improve our Military Leadership

Before turning to examine leadership on the political side let us briefly consider how we might aim at obtaining more successful leaders on the military side. This is a well-worn topic and hinges round two main subjects—how to select young commanders and how to differentiate between commanders and staff officers. It should be made clear that the following remarks deal mainly with the problem as it exists in peace time. We have already agreed that we chose good leaders as the war progressed. There is not much

difficulty in this. One has to start the war, however, with peacetime leaders. Moreover, the state of the Army in war depends largely on the work of the leaders before the war. As all rapid progress depends on leadership from the top, no excuse is needed for dwelling in some detail on this subject:

Let us deal with the age question first. There are naturally many advantages in youth for a military commander; he will face risks that an older man might shirk. In civil life one finds comparatively young men rising to high and responsible positions at an early age, but for that matter one finds comparatively elderly gentlemen holding very responsible positions with equal success. Now the question of quicker promotion so that the younger officers may reach the top is one that has been much discussed. Though much can and has been done at times, the problem of arranging for young officers to become senior commanders in peace time is largely insuperable except in a few special cases. The reason is not far to seek. In civil life the youngsters all start level and nearly all reach a stage of promotion which compares with that of a captain in the Army. It is at this point that selection begins in civil life. A large proportion—perhaps nine out of ten—remain in this stage which corresponds to the rank of captain in the Army for the rest of their lives. They realise that they are not worth more and remain comparatively contented in this stage. Their expenses are small, and they can continue at routine work, which they execute very well, till they reach about sixty years of age. The brilliant men shoot right up at about the age of thirty-five and reach high and responsible positions. If it was possible for the Army to copy this simple method of obtaining young and able officers as leaders in important positions, all would be well, but it is not possible. In civil life a man receives his orders in writing. In the Army he is often shouted at on parade or in the field. How could we have old captains of fifty years being shouted at by young men in their thirties? The only way to achieve this result in the Army is to kick out large numbers of officers between thirty and forty years of age. This cannot be done without making the Army so unattractive as a profession that the supply of officers would fail. Hence we are reduced to our present policy of trying to weed out the weakest officers, but accepting the position that the more senior officers must be men of some age.

At first sight this may seem rather hopeless. We have seen that there are grave difficulties to be faced if we wish to get com-

paratively young officers at the top. Naturally it is possible in a few special cases to give accelerated promotion to certain young officers, but the bulk of the more senior appointments must be held by men of some age. Are we, however, quite certain that it is necessarily age which leads to lack of initiative and complacency at the top? Men of middle age are often very successful in civil life. I think there are other causes to blame. Let us see what type of officer has usually been most favoured in the Army in the past. As a subaltern everyone liked the young man who was full of ideas and initiative and got things done. Much the same applied to a captain, though he was expected to temper his activity a little. As a major or as an officer holding a second-grade appointment a difference became evident. New suggestions made by a subaltern can cause no harm and they may amuse the senior officers, but when the stage of a second-grade staff officer is reached, such suggestions may become "tiresome." People listen to an officer of this seniority. He may be right, and he usually is. If he talks a lot it may mean accepting changes which mean temporary dislocation and such a lot of extra work and bother for the men above. Hence there has in the past been an inclination to give such an officer a pat on the back but also a hint to curb his impatience. If he did not take the hint his upward progress in the Army might be retarded. It is here that the whole root of the trouble has lain. He might say to himself: "I know I am right, but my views are not wanted. Therefore I will shut up for the present, and when I reach high position I will then bring forth my views and do a lot of good." But he will have to suppress and stifle his views for about ten years to achieve this plan, and at the end of that time he has become so used to suppressing change that he is converted into the way of thinking of the senior officers who went before him. A man who cheats his conscience in this way for a number of years can never regain his freedom of thought. This is how progress has been suppressed in the Army in the past. Fortunately we have to-day a young and far more progressive class of senior officers as a whole. While this lasts the officer of medium seniority need not suppress his conscience and can rise in his turn to a senior position with a full realisation of the possibilities of effecting progress by bringing in the necessary changes. And so long as this lasts there is not necessarily any particular harm in having a proportion of the more senior officers of middle age. The position, however, needs a close watch, it is very easy to slip back into the bad ways. It is

much more comfortable to leave things as they are, and older men are more prone to desire comfort. With all these thoughts in mind it seems reasonable to propose that our commanders shall be men of moderate age with a leavening of considerably younger officers to ensure that we do not return into the bad old ways of suppressing change for the sake of the ease and comfort that comes with such suppression.

We now turn to the more difficult question of commanders and staff. For many years it was the custom in the Army to select commanders from successful staff officers. It was considered essential that commanders should previously have been staff officers so that they might understand the detail of staff work. Hence it was that successful staff college graduates served for years as staff officers and then almost automatically became our commanders. This is the system that produced our leaders before the Second World War. As a result we had some woeful failures in the early part of the war. These matters were of course put right as the war progressed, but unless we put our system right we shall have the same troubles again in the post-war years. My own view is that staff work is definitely bad training for a commander. This does not mean to suggest that a commander should never have been a junior staff officer. Some training in that direction is definitely desirable; but an officer who has served nearly all his life on the staff hardly ever makes an outstanding commander. His years of training as a staff officer have made him see so many difficulties, that he is beset with them. It is the duty of a staff officer to see difficulties and point them out; it is the duty of the commander not to allow himself to be unduly influenced by them. This is definitely difficult for a staff officer who has spent most of his life doing so. Would Mussolini ever have launched his very successful Abyssinian campaign if he had been trained as a staff officer for years? All the staff officers in Europe, including the Italian staff, predicted a disaster, but the commander measured his chances and took the risk and never looked back. Whatever one may think of the justice of this campaign it was a fine military feat, which few staff trained commanders would have faced. Much the same applies to Hitler's advance into the Rhineland, where the German General Staff predicted disaster.

The Navy have never been obsessed with this staff college training. In fact they have possibly pulled too far in the opposite direction.

Their problem is, of course, quite different from ours; there is not the scope for staff work in the Navy that exists in the Army, and much the same applies to the Air Force. It is, however, generally considered that the Navy has produced better commanders than the Army. When a problem is dealt with by the Committee of Imperial Defence it is well known that the Army produces the best staff appreciation of the three services, but the Navy implement the plan far more quickly and decisively. This shows quite clearly the superiority of command in the Navy and staff work in the Army. How then can we rectify this position and strengthen our production of commanders without losing our invaluable position in staff work? Fortunately the problem was solved just before the outbreak of the Second World War. The solution was one which many of us pressed for over a long period. That was in the less enlightened days when our more elderly seniors were resisting change. The solution was the establishment of Minley Manor as a senior branch of the staff college. Officers first went to Camberley, where they learnt pure staff work, and then served as junior staff officers. After that, those who had shown that they possessed the qualities of commanders were sent to what was really a commander's course at Minley Manor. In addition, officers who possessed these qualities but who had not passed through Camberley could also be sent to the course at Minley. This curriculum was of course interrupted by the Second World War, but it had been the intention that these officers, or at any rate a proportion of them, would not be employed on repeated tours of staff duties which is so cramping to initiative, but given positions where they could practise the power of command. In this way, if the war had not intervened, we should have built up a body of trained commanders and filled this gap which was definitely a weak spot in the Army. This excellent system should certainly be introduced again after this war.

While dealing with the question of leaders and commanders one is tempted to include a few additional remarks. They are platitudes, but they are so often overlooked. First of all comes the fact that very few commanders have succeeded in extracting 100 per cent from their troops in times of crisis. It comes about in this way. A leader is commanding his troops. The troops have spells of intensely hard work intermingled with periods of rest. The commander never has complete rest. After a few days or a week the commander is definitely fatigued. He has seen the men when they were very tired, but does

not appreciate that they carry no responsibility and rest well between times. Being very tired himself he forms the opinion that his men are tired. His staff and junior commanders may be equally tired. He then recommends the necessity to rest his troops. He will probably obtain this break, but he has not got 100 per cent out of his troops and as a result he may jeopardise the operations as a whole. Few commanders have worked their troops to the full capacity over a fairly long period during a crisis.

An outstanding example of this was in 1914. The British Expeditionary Force retreated. During the first few days the troops marched and fought till they dropped asleep. After a few days they became hardened. They marched all day, but they had some sleep at night. They soon recovered their spirits. But the Commander-in-Chief and his staff became more and more tired. They saw their troops looking very tired at the end of a long day's march. At the end of the retreat the Commander-in-Chief said that his troops must rest and refit, but by then the troops were not tired at all. It was only the overworked commanders and staffs that were exhausted. Luckily better counsels prevailed. The British troops were ordered to face about and advance on the enemy. All signs of fatigue had vanished, and they took an important part in the battle on the Marne, but the exhaustion of the commander nearly resulted in excluding a vital part of the allied forces from this battle. I was with the troops as a junior officer and so the lesson was vividly imprinted on my mind.

There were also examples of these conditions during the fighting in Libya and Egypt in 1941 and 1942. In those epic battles the armies on each side advanced or retreated over great distances in turn. This is the most exhausting form of warfare for the commanders. On the German side Rommel was constantly relieved and flown back to Germany for a rest. On our side our commanders had no rest of any kind at any time. Some examples of the commanders becoming fatigued more than the troops were therefore bound to occur. There is no doubt that several commanders became more tired than their troops when Rommel drove us back to the El Alamein position in the autumn of 1942. They had shown very fine leadership over a long period, but no human being could stand that strain indefinitely. It is no discredit to them when we say that the troops were less tired than they thought and responded at once to the demands of the new commanders who relieved them. The added

lesson in this case is the necessity to provide rest or relief for commanders after periods of great strain.

To turn to another aspect from the point of view of the commander, one cannot help being impressed by the constant necessity of obtaining the views of the officers of medium seniority. I do not mean the seeking of their advice during battle, but the interchange of ideas in quiet times. Nearly all new ideas originate from men between the ages of thirty and forty-five. We have already seen that most senior military commanders must of necessity be above this age, but that is no reason why they should not acquire and acknowledge the ideas of the less senior officers. Yet this is just what so many of the more elderly commanders are the least inclined to do. There are, of course, notable exceptions, but we can all of us think of so many senior commanders who could not bring themselves to believe that young so and so could tell them anything. It needs a definite effort as one gets older to force oneself to discuss matters in general with the less senior officers and obtain their views; it is in no small measure the secret of success as a commander to do so. During his military career it was the invariable custom of Field-Marshal Lord Wavell to take every opportunity of asking officers of medium seniority for their views. He would collect them round himself and ask them what they were talking about. Thus invited they would talk very freely and express their own views. Lord Wavell never gave any indication as to whether he agreed or disagreed and invariably replied: "I see." He learnt a lot and gave nothing away. In my own small way I tried to copy him, and the following example may be of interest. When I was sent to Russia in the spring of 1943 I had to take over the British Military Mission that had been a complete failure. The Mission had been boycotted by the Russians and they had been given no liaison of any kind. This was the turning-point of the war in Russia and yet we had no information of any type about them. We had gone out of our way to be suave and courteous to the Russians, but they had not responded in any way. I asked for official advice from the senior officials at the Foreign Office and from the Ambassador when I arrived. My advice in each case had been to continue this policy. I did not feel at all happy about this and had taken the trouble to collect officials of medium seniority at the Foreign Office and later at the Embassy to sound their views. None of them would have dreamed of volunteering the information which they gave me, but

when I collected them together they informed me that their view was that my only chance of success was to be very outspoken and blunt with the Russians from the moment that I arrived in Russia. This worked with great success. The Russian is very forthright. He was sick to death of our suave diplomatic manners. When I took this good advice which I had obtained from these less senior officers the Russians responded at once. The Mission was able to have long discussions with the Russian General Staff for the first time. We exchanged our experience in North Africa with theirs in Russia to our mutual benefit. That summer the Germans made their last desperate effort to smash the Red Army. The Russians were ready for them. The course of the battle followed exactly on the lines of our discussions. For the first time in the war the Russians made a successful stand against a mass attack of Panzer divisions. A little later and at the psychological moment they turned to the offensive, and from then onwards they never looked back. It is fortunate that we had those unusually good relations with the Russians during that vital period. It was all due to the advice of those officers of medium seniority.

I tried hard to get our diplomats to adopt a more forthright manner with the Russians, but I failed. They continued with their policy of appeasement and giving in on almost every occasion. This policy produced no results at all. Most of the troubles that we had over Poland in 1945 would have been avoided if we had been plain spoken with them on diplomatic matters from the start of the war. The Russian likes plain speech.

Our Political Leaders

Let us now turn to the leaders in the political world. One need not say much about the position just before the First World War. No one will want to pretend that there was much leadership at that time. Our voice was unheard in the counsels of Europe. Even after the clash had started, the Cabinet did not know the spirit of the nation. They held back from war, doubting the views of the country, and it was the nation that pushed them on and showed the British determination to see justice done. By no stretch can this be called leadership. Then came the war period and the arrival of Mr. Lloyd George. Here we had a leader without any doubt at all. Of course he made mistakes—every great statesman does—but there is no

denying that his driving force did much to win the war. He had a large share in moulding the Ministry of Munitions which proved to be such a successful concern. The Ministry of Propaganda and many other war-time activities were the result of his leadership. Many people deplore his post-war activities, but no one can deny the value and quality of his leadership during the war.

Turning to the period after the First World War we find a very different story. Can anyone suggest any direction in which there was true leadership of political work between the two world wars? It was just a period of drift without leadership of any kind. It is easy to be wise after the event, but as that is the regular habit of critics of our military leadership we may as well turn the tables. Taking the political side of military policy we see that we drifted into a quarrel with Italy over Abyssinia. We had no reason for any friendship with the latter country, in fact we had very unsatisfactory dealings with them on several occasions in the past. Surely it would not have needed any great foresight to see the difficulty looming ahead and to expel them from the League before the trouble had arisen. They never had any right to be in the League, and our position was strong enough to have objected to a slave-trading nation being in the League. We could then have quite well supported Italian claims on Abyssinia; the country largely deserved this fate, and there was no sense or reason in losing Italian friendship for the sake of Abyssinia which had given us much trouble on many previous occasions.

The case of Japan was more difficult, but they had been faithful allies to this country during the First World War. Surely we could have made some sort of terms with them. With no one to guide them they have drifted back to an aboriginal state in which they have committed terrible atrocities. We thus made two powerful allies into enemies and we still remained practically unarmed ourselves. This is the path into which we ran after years of leaderless political drift.

Turning to the civilian side of politics we find that our leaders fared no better. We will take an example and compare it with military leadership. It has already been acknowledged that our military leaders as a whole did not show any exceptional vision during the First World War, but the tenacious character and courage of Douglas Haig has been referred to. This is an important part of leadership. He decided quite early on, and after due consideration,

that the war would be won on the Western front. He then met with failure after failure in the prosecution of the war; first of all the Somme, then Ypres and then the almost overwhelming attack by the Germans in 1918. Throughout this period Douglas Haig remained calm and confident, in spite of the clammerings of politicians to disperse the troops to other fronts. That he made mistakes is obvious, but they were nothing compared to the disaster that would have overtaken us if he had not shown such fortitude. In the end he launched his final counter-offensive, as we have already seen, and his courage was rewarded. We would never have won the First World War in four years if it had not been for the great character and determination of Field-Marshal Douglas Haig.

Let us now compare this leadership with that of the politician after the First World War. In 1923 the Prime Minister made up his mind, after due consideration, that tariffs had to be introduced to save the country and that we had to arrange preferences with our Dominions. He went to the country on this issue in much the same way as Douglas Haig launched his offensive on the Somme. He met a minor rebuff at the polls; nothing approaching the series of failures with which Douglas Haig was confronted, and yet he withdrew half his resolutions. Just imagine what would have happened in France if our Commander had been a weak, vacillating leader. Tariffs may be right or wrong, but the man who tells the nation that they are essential and then changes his mind after a minor rebuff cannot be called a great leader. If we have not met with any too much success in military leadership, it seems clear that we are in a far worse plight as regards political leadership.

How to Improve our Political Leadership

Shortly after the Second World War had broken out we had our great leader, Mr. Winston Churchill, who carried us through the war. The British nation always rises in a great emergency and finds the right leader. Good military leaders came to the front in much the same way. This does not, however, help us to bring forward and select our right political leaders in normal times. Yet the whole future of our Empire depends on how we do this in normal times. If we continue with the indifferent material that we have had in the past as political leaders we shall cease to exist as an Empire. This very vital matter is therefore discussed and a proposal is made to

rectify this difficulty in the remaining pages of this chapter. The majority will probably agree about the seriousness of the position and about the basis of the difficulty. Many readers will, however, consider that the proposed solution is impossible or even absurd. Let them therefore make their counter-proposals. No one has so far made any suggestions for a solution to this problem. Of course a very important matter of this nature would need much discussion before it was adopted. Any original proposals would be amended and modified. We must, however, make a start. The proposal in this chapter may be a bad one, but it is at least a start. This problem must be pursued.

In order to elucidate the problem we will first turn to consider similar problems that have arisen in the past in the hard school of industry. Before the First World War most of our industrial concerns were privately owned or controlled. They had been built up by great men who had proved their worth, but their sons were not necessarily so gifted. When it came to the third generation the inheritor of the business was sometimes quite incapable of assuming control. Of course there have been many examples of family concerns which were extremely well run for many generations, but these became the exceptions. We have all of us in the past seen industrial concerns fail through this reason, and we have felt a sincere sympathy for the working man who has lost his living through the inefficiency of a rich inheritor. Whatever we may think of heavy death duties, they soon killed this risk, and private industrial concerns have almost vanished. Large companies or a group of subsidiary companies have taken their place. A board of directors now select the managing director. So long as he produces the goods he is left with a free hand, but the board keep a close watch and are prepared to introduce a successor if the managing director proves to be a failure. This is the system that has been hammered out as being the best after many trials and experiences in the industrial world.

Why should we not copy this system in the political sphere? How do we at present choose our political leader? We make a shot and choose a leader. Whether we find later that we chose wisely or not, he is practically certain to remain the leader of that party until he is an old, old man. If anything is said against him it is called disloyalty to the party. If his bad leadership causes sufficient concern to the party, a meeting demanding a vote of confidence is held.

Such a meeting is often a packed house, but even if it is not, a few well-chosen speeches and a few dramatic remarks by the leader will result in the necessary vote of confidence.

The fact is that there is no means of dispensing with the services of a political leader who has proved a failure, nor of bringing able young politicians to the front who might make suitable successors. That this should be the position over the selection of the premier post in the country is of course deplorable. Such a state of affairs would render our industrial concerns bankrupt in no time.

Let us therefore turn to the analogy of the industrial world. How can we obtain a board of directors for our political world? We will take the Conservative Party, though it applies in much the same way to any party. There are a very large number of conservative associations in the country. Though the heads of these bodies are often elderly men, they have usually given much thought and study to politics and their associations are generally well conducted. Why should they not select a board of elders? Each association would be given one or two or more votes depending on their size in the selection of each elder. This board should, of course, be quite small—say five elders—and their duties would simply be to elect the party leader, to intimate to him when his time was up, and to ensure that a suitable successor was always available whose name and personality was known to the people. The leader would be given a perfectly free hand to set and pursue his policy and he would be judged by results. The elders would of course be men of advanced years, but that would not matter. They would not be required to launch new campaigns or take political risks for which so much youthful energy is necessary.

If this proposal is not acceptable, what other suggestion can be made? At present the leader is managing director and the board all rolled into one. There is no means of telling him authoritatively that it would be better for the party if he resigned. Hence the leaders have remained so long after the time when they should have retired. It is often stated that this is done because there is no one to replace them. Of course there is no one. Is the leader going to spend his time in bringing to the notice of the public the name of a younger man who should supplant him?

If the leader selected by the board of elders proved successful he might remain in that position for a long time, but usually a period of five to ten years would prove sufficient. During this time the

elders would be bringing to the notice of the public the capabilities of some of the younger men, and one of them would in due course take his place. This would provide the very necessary flow of promotion in the party. Able young men would be attracted to the Conservative Party. The comparatively young leader would select able and virile men for his cabinet. A feeling of determination to deal vigorously with our problems and find the right solution would sweep through the country under such leadership. The Conservative associations would meet with widespread support instead of the present-day apathy. A general rejuvenation would take place. It is long overdue.

It may be suggested that it is not possible to lead this country faster than it cares to go. The older politicians have often made this excuse. You must make some excuse if you are not a born leader. Nothing is further from the truth. Within the bounds of a very strict principle of right and wrong the people of this country are easily led by a true leader. Overstep these bounds and you will be swept away.

It may further be suggested that these proposals are unconstitutional. It is H.M. the King who asks the Premier to form a government. This is true, but the selection of the party leader is entirely a matter for the party and it is a right which they have been denied to this day. The party having selected the leader, or even replaced him if necessary, the King would ask the leader of this or that party to form a government. That is perfectly constitutional.

There are many who think that democratic government is doomed. The advantages of totalitarian government are great. All the delays in leading people to a stage of understanding so that they will follow the leader are avoided. If we refuse to accept any change it is obvious that the present form of democratic government is doomed. It is too slow for modern conditions. We must speed it up, and energetic leadership is what is required for that purpose. We have considered one solution here. If it is not the best, let the critics be constructive and suggest a better. Something must be done.

The recent failure of the Conservative party was the direct result of the poor quality of leadership in this party during the past twenty-five years. The present system will give us no better leaders in the future.

On Organisation

THE DEVELOPMENT OF INDUSTRIAL ORGANISATION

MANY people consider organisation to be a dull subject. Army people connect it with tiresome examination questions dealing with figures and numbers. Such details are irksome, but a study of the higher principles can be of absorbing interest. The importance of the subject cannot be questioned, and yet, strangely enough, some great leaders have made the pronouncement that if you have the right men organisation does not matter. I have twice had a master who has made this statement when dealing with important questions. In each case he proved to be wrong. It is naturally true to say that good men will make any organisation work, but to obtain anything like full efficiency from the average type of man it is vital to have a sound organisation. One has only to look round to see that this is true. With British people, when one finds that someone is not pulling his full weight, it almost always turns out to be due to mal-organisation. He is either working for two masters or he may be working for one and another may have the responsibility. This applies equally to all great concerns. No excuse is therefore needed for including in this book a chapter on organisation.

The best examples of sound organisation to suit modern times are naturally found among our largest civil industries. Even the largest of these are, of course, incomparably smaller than any one of the Service Ministries, and yet much can be gained from a study of the main principles of organisation which they have evolved. Government departments usually follow civil practice in most matters, though naturally lagging some way behind. We will therefore examine the stages through which civil organisation has passed, to see if we can glean some ideas

for the proper organisation of government and service departments.

The organisation of civil industry appears to have passed through two phases before reaching the present position. The first phase refers to the early days, when small concerns existed all over the country. These small businesses had been developed from the village workshop. The work was good but the price of the manufactured articles was very high. There was no pooling of resources. No system for combining demands for raw materials, so as to produce a cheap source of supply. In fact the system was based on individualism and there was no co-ordination at all. The high price of the articles that followed from this precluded any widespread demand and progress of the industries was very slow.

The next phase was the arrival of big business. All the smaller concerns were gradually bought up or broken. There was a high degree of co-ordination. Prices fell and demands rose rapidly, and mass production began to make headway. The system brought with it a large degree of centralisation. Nothing could be done without reference to headquarters, and almost every detail was settled at the centre. The evolution of big business of this nature started many years before the First World War and lasted some years after it. The system was efficient, but the reason for this must be appreciated. In those days the world was much more simple than it is to-day. Wireless was in its infancy and so was flying. There was no such thing as broadcasting. The demands of the people were comparatively simple. The high degree of centralisation limited initiative and variation in supply to meet local needs, but that did not matter in those days, and the centralised control brought down the prices. This form of big business was therefore efficient and a lot of money was made.

During the First World War, however, and particularly after that war, everything began to become far more complicated. The demands of the people were more numerous and widespread. A few simple articles no longer filled their needs, and the existing organisation of big business was so centralised that it was often unable to meet the varied demands. In some cases smaller concerns that were less cramped in this way began to raise their heads. Big business began to lose the lead and had therefore to accept a change in organisation.

This brings us to the present phase. A large measure of decentrali-

sation is now adopted by all great concerns. This is the only way to meet the varied demands which come with the modern complications. The main policy and the big decisions are taken at headquarters. Purchasing organisations are co-ordinated at the centre, and the same applies to research work. On the other hand, a large measure of decentralisation is accepted over the matter of the actual production of the goods. In this way we arrive at a comparatively small headquarters for the control of policy and research, etc., but the actual work of production is decentralised to specialised bodies (usually separate companies) which are allowed plenty of initiative and can use their energy and drive to the full to achieve their particular purpose. The activities of these separate companies are co-ordinated at the centre to avoid overlap and waste, but in all other respects they act as individual concerns.

Lord Nuffield's industrial concerns are a good example of this last phase in the organisation of a big business concern. Another good example is the Imperial Chemical Industries. In both cases all thought, research, buying of materials and policy is settled at the centre. Each of these concerns produce a variety of products. After the decision has been made at the centre, a large degree of decentralisation occurs. Various subsidiary companies and works have to produce their particular goods and they carry this out in their own way. In this manner they use all the initiative and drive of these smaller companies or works while retaining control at the centre.

The Development of Army Organisation

Turning to service organisation, and that of the Army in particular, we find that it has followed much the same lines, though naturally lagging some way behind the civil side. First of all, in the very early days we had almost complete decentralisation, without much control from the centre. Officers commanding units were a law unto themselves. They paid and fed their men as they thought fit. Some were good and some were bad. The same applied to training. There was practically no direction from the top. This corresponds to the individual effort of the small industrial concerns founded on the village workshop. Both were equally inefficient from an economic point of view.

Then came the Haldane reforms before the First World War,

following the lines of the centralisation in civil industries in their second phase. Everything was centralised at the War Office and a high state of efficiency was reached in the same way as with the civil industries in this phase. Here again the reason for the efficiency was the same. The Army was a very simple affair before the First World War. It consisted of infantry armed with rifles and a few guns and machine guns and some cavalry. Nothing could have been more simple. It was therefore quite right to centralise everything at the War Office. There was no room for individual initiative or drive in peace time, and this centralised organisation was just what was wanted.

Then came the introduction of complications in the military machine which compares with the rise in the demand for the variety and number of different needs in civil industry in the third phase. The Army is a very complicated affair to-day. This is as inevitable in modern war as it is in civil industry. In addition to the older arms, a modern army needs tanks and all forms of fighting vehicles, full co-operation from aircraft, every form of use and protection against gas attack, all forms of wireless communication and the complications which they bring with them such as interception, coding, etc. But whereas the civil industries have solved this problem by entering a third or modern phase and allowing a large degree of decentralisation, the Army has not yet acknowledged this phase and retains both policy and detail executive control at the head of affairs in the War Office. The Army has not yet followed the civil side in this last change back to a large degree of decentralisation for executive control. Although the Army has been quoted as an example, the same applies in a greater degree in the Civil Service and perhaps in a lesser degree to the other two fighting services. In each case we find great difficulty caused by over-centralisation at the centre. Naturally policy and all major questions must be settled at the centre, but in all these great services we find the smallest details being settled there as well. This is certainly a lap behind progress in civil industrial organisation and it puts a brake on initiative and drive and really rapid progress.

How to Put Matters Right on the Army Side

No one is going to pretend that the headquarters of a great government department or service ministry can be reduced to a

small concern to settle policy only, on the lines of some civil industries. These ministries are incomparably greater than the largest civilian counterpart. Much could, however, be done in this direction. We must first clear our minds on the vexed question of organisation by subjects or objects, and we will continue to use the Army as an example. In deciding on an organisation there is almost always the choice between these two methods. For instance, if we take the training and equipment of the Army we can organise them subjectively or objectively. By the former method we would have two great directorates at the War Office; the one would be responsible for all training, including both individual and collective training of all the various branches of the Army; the other would be responsible for the direction and instructions issued to the design and supply branches for the equipment required by all the units of the Army. This is an organisation by subjects. On the other hand, if we organise by objects we find a large number of small headquarters at the War Office. Each headquarters deals with one main object, e.g. armoured corps, signals, artillery, etc. They would be responsible for the direction and control of all individual training and the directions issued to the design and supply branches for the equipment of that part of the Army. Their object would be to bring this portion of the Army to the highest state of efficiency. In other words, they would be the headquarters of this special branch of the Army which would correspond to the specialised company in civil industry dealing with that particular activity. The activities of these small headquarters would naturally have to be co-ordinated, but this presents no difficulty. There is little doubt that an organisation on these lines brings with it the possibility of great drive and initiative and rapid decisions.

It is not, of course, possible to generalise too far. The higher training of the Army must be organised subjectively and so must the direction of our military operations. When we come to military intelligence a compromise would probably be the best solution. The organisation of military intelligence as a whole must be a subject organisation and can be conveniently controlled alongside the operations staff, but the detail study of intelligence reports would be best dealt with objectively, i.e. by the small headquarters for each activity referred to in the previous paragraph. The reason for this is simple enough. It is not possible for each activity to maintain a staff to watch and collect intelligence which interests them

alone. This staff must be pooled and the officers whose duty this is cannot be specialists in every line. They send in all the information they can get and all this is controlled and sorted out by the directorate dealing with intelligence. The detail information should then be sent to the various small headquarters dealing with each activity. It would be examined here in great detail, and much more would be deduced from the information. If further information was needed on certain points this would be demanded from the directorate. In this way we could combine an object and subject organisation, using the advantages of both.

Then the Department of the Adjutant-General at the War Office deals with all personnel questions. At present the whole department is organised subjectively. This is the worst form of centralisation. Of course all the great man-power questions and the decisions as to the proportion of available men that should be allotted to the various arms must be decided by the Adjutant-General at the War Office. Many other subjects such as questions of pay must also be dealt with centrally as a subject organisation. But at present we find this great department dealing with all the little details of each arm and branch of the service. Such questions as to whether a major in one corps of the Army is to be promoted are normally considered and settled by this central department. Quite clearly the work of this department should be divided into two portions. One portion would be all the main questions such as those mentioned above which affect the whole Army. These must obviously be dealt with centrally by a subject organisation under the Adjutant-General. The other portion should include all the personnel matters affecting any one particular activity in the Army. This work should be handed over to the small headquarters mentioned above which deals with this activity.

The Proposed Organisation

All these views and ideas were produced by the "younger generation" about the year 1935. I wrote them out on the above lines and circulated them round. What it came to was that the following matters would have to be dealt with centrally and subjectively at the War Office.

Military Operations and Intelligence.

The higher military training of the Army.

Main personnel questions (Adjutant-General).
Main administrative policy (Quartermaster-General).
Design and provisions of munitions (Master-General of the Ordnance).

The activities that were to be dealt with objectively were as follows. These corresponded to the specialist or subsidiary companies in civilian industry.

Infantry.
Armoured Corps.
Artillery.
Engineers.
Signals.
Air co-operation.
Anti-aircraft and coast defence.
Territorial Army.

Each of these activities was to be a directorate and the director was to be responsible for:—

- (a) Advising the General Staff on the employment of his arm or activity.
- (b) The individual training of the personnel.
- (c) Seeing that his activity received the right equipment.
- (d) The organisation and establishments within his activity (subject to overriding control as regards man-power and pay of personnel).
- (e) All personnel matters within his activity and advising the Adjutant-General on personnel matters that were settled centrally but affected him.
- (f) Technical intelligence.

In other words, the Directorate was to be responsible for producing properly trained and equipped units and handing them over to the Army to be used. This may be described as “forging” the weapon as opposed to “using” the weapon. One person must be responsible for forging it; many people will use it. This was an exact parallel to the duties of the companies in civil industry. They manufacture the article and sell it to the public who use it. They also advise on how best to use it. If the article is bad the public do not buy it and the company goes bankrupt. With this proposed

organisation the directorates would have had a fair run without interference. There is little doubt that this would have produced great enthusiasm and drive.

These ideas were just beginning to take effect when the Second World War arrived. After two years of the war I revived these views and suggested them to Lt.-General Weeks, who was dealing with these matters at the War Office. A little later they formed directorates for all the activities mentioned above. Their powers were, however, very limited. The main duty of these directorates was to control the design of the munitions which their activity needed. They dealt, of course, with establishments and were consulted about most matters which affected their arm or branch, but they were not given anything like the scope of the duties enumerated above from (a) to (f). In fact they could not be considered as "specialised companies" with decentralised power and with all the drive and zeal that would follow. Individual training was retained under the Director of Military Training (a subject organisation), although the instructions and pamphlets had usually to be prepared by the directorate concerned. All personnel matters down to the last detail remained in the hands of the Adjutant-General. In fact the War Office remained almost entirely as a subject organisation, but with just a little ray of hope of some decentralisation to these directorates.

It would have meant a fairly considerable change to adopt an objective organisation and give these directorates full powers. Many people thought that it would be a mistake to carry this out during the war. Then the War Office Finance Department never liked decentralisation as it made it more difficult for them to keep control. Actually there would have been no real difficulty. The change would mainly have consisted of taking some staff officers from their "subject" groups and putting them in the "object" groups. We made bigger changes than this during the war, such as the formation of the Electrical and Mechanical Engineers Corps. It is a great pity that we did not take this first step forward in decentralisation during the war. It should certainly be done after the war.

An Extension to these Proposals

So far we have mainly been discussing an organisation based on having small headquarters of each activity at the War Office to

control them. These are in effect the headquarters of the "specialist companies" which we referred to when drawing a parallel with civil industry. But when we come to the post-war peace, what we now want is the "specialist companies" themselves. In other words we would like to have, say, the mobile and armoured troops located in one area so that they can train together and carry out trials and solve their particular problems with the least possible delay. Then we would like to have the signals largely concentrated in another area for the same purpose, and so on. Of course all the various arms and branches would have to collect together for higher training, but until then they are best grouped largely by arms to help each other in solving their particular problems. That was to some extent already in existence before the war. For instance, the mobile armoured forces were mainly on Salisbury Plain. There was a strong signal concentration at Catterick. Eastern Command had a large proportion of anti-aircraft troops. What we would like would be for the small headquarters at the War Office to be able to deal with one body of troops to find the solution of the various problems that arise. Unless this is done decisions can only be obtained after considerable delays. Each Command is asked for views on most subjects. They usually differ widely in their views. If the officers who expressed those views in the various Commands were grouped together they would usually reach agreement after a discussion, but this they cannot do as they are so widely separated. We should therefore pursue this aim of collecting troops of the same type together as far as possible for individual and the early part of collective training and move them to suitable areas for higher collective training. In this way we shall approach the organisation in civil industry which has specialist companies working and solving the problems of each particular activity in their own locality.

So far we have been on firm ground. All the proposals that have been made could be carried out without undue difficulty and should introduce the drive and initiative which is so much needed in modern times. But we are still some way behind the parallel civil organisation. To reach this parallel the small headquarters at the War Office should be out with their specialist companies. That is where they are in civil life. At present they have to remain at the War Office due to the system of financial control. As everyone knows this is centralised down to the most minute details at the Treasury. So long as this is so the small headquarters of these

various activities have to be at the War Office to fight with the Treasury through the War Office finance branch for every little detail. If financial questions could be decentralised to Commands then these headquarters could go out to Commands and the War Office could assume its proper role of co-ordination of thought and policy, etc., without being burdened with detail executive action, and we would reach a true parallel with the organisation of great industrial concerns. This applies in greater or less degree to all departments at the War Office. This decentralisation of financial control would result in large reductions to the size of the War Office staff and considerable financial savings.

This question is, of course, an old one and many schemes have been evolved for the decentralisation of the War Office Finance Department. The subject was seriously considered just after the First World War; a system of cost accounting was introduced and the plan was that the cost of administering and training every type of unit should be evolved. When this had been done a lump sum would be allotted for this purpose to each unit, but the detail method of expenditure would be left to the officer commanding the unit. This proposal was definitely on the right lines, but here again the War Office Finance Department considered that it would reduce their power of control and the whole scheme was dropped. They did, however, introduce some measure of decentralisation to Commands during the war which was helpful, although it only touched the fringe of the subject. There is no doubt that much of the abuse which is hurled at the War Office is due to the fact that the executive officers have to refer every little detail to the War Office Finance Department for their decisions and work is cramped in every direction. Any business concern that put its accountants into a position of power in this way would go bankrupt in no time. This is a matter which needs urgent attention.

The General Application of these Views

In the above paragraphs we have made proposals for improving the organisation at the War Office and for the control of the Army. They were given in some detail to show what we had in mind as the type of organisation for improving the position in Government ministries generally and were made on the basis of successful industrial organisation. A small step has already been made in this direction in Army organisation. Let us hope that it will grow and

expand and perhaps serve as a model to help other bureaucratic places to decentralise and help the cause.

There is just one other point on organisation which seems worth mentioning before we close this chapter. Any organisation is apt to grow into the form of a conical tree. A subject organisation is particularly prone to do this. At the head of the tree we have Mr. A. He controls, say, four directors, Messrs. B. Each director has, we will say, four deputy directors, Messrs. C., and they in turn control four branches, each in charge of a Mr. D. An important point of policy now arises which must be decided by Mr. A. It mainly concerns one particular activity. Mr. D., who is in charge of this branch, knows all about it. It is a complicated story, but Mr. D. is a specialist in this line and has it all quite clear. Mr. C., the deputy director above him, asks him about it, but the subject is not his particular line and he only takes in three-quarters of the story. In a similar way when Mr. C. explains the position to Mr. B., who is above him, another quarter of the story is lost and Mr. B. only takes in half the whole story, and this is what he gives Mr. A. at the head. Have we not all of us seen this happen over and over again in large organisations? The answer is to cut out the middle man. Turning again for a moment to the Army, many officers will remember the activities of General Sir Travers Clarke as Quartermaster-General of the British forces in France during the First World War. He had a very great number of branches and activities under him which he had to control and he was eminently successful in doing so, but he never grouped them by fours or fives under deputies. He dealt direct with all of them and as a result he heard the true and complete story from the man who really knew it all. Decentralise a bit more and trust the man in charge of the job and then you can cut out the middle man. The top men can co-ordinate and control just as well without them. So cut down the middle men to the minimum, they are a perfect nuisance in every walk of life.

Before embarking on a change of this nature we would naturally wish to see whether there is any past experience to serve as a guide as to whether this system is likely to prove successful in a government or military organisation. I fear that the only example about which I know again comes from the Army. It is given here for what it is worth.

Early in 1941 the Royal Armoured Corps was given a commander with headquarters and a large measure of control over their own affairs. At that time the Corps had lost nearly everything in France

and had practically to start from scratch. Field-Marshal Sir John Dill then took this progressive step of forming what was in reality a "specialist company" to make armoured forces and hand them over when formed and trained to the Army. It also advised on the use of the armoured forces just like any company advises on the correct use of its products. If this headquarters had never been formed and if all this activity had been handled by the normal War Office staff, failure would have resulted. Drive and zeal naturally follow from the formation of a headquarters of this nature. The equipment side was retained in the War Office and never handed over to this headquarters. The story of the formation and raising of our armoured forces during the Second World War and the development of their technique for war is described in outline in Chapter 8. It will be seen that three lessons stand out clearly from this experience. First of all, the work of this "specialist company" in raising these forces and developing their technique was generally acknowledged to have been very successful, and as a result our armoured forces rose superior to those of the enemy after a period of eighteen months. Secondly, as a result of our failure to hand over the design and production side to this "company," we remained behind the enemy in this work all through the war. Thirdly, the abolition of the existence of this headquarters, which occurred towards the end of 1942, resulted in deterioration of the efficiency of the Royal Armoured Corps. Even then the Royal Armoured Corps carried on with its own momentum and fought splendidly in France in 1944 and 1945. It was due to the abolition of our headquarters that pressure was relaxed on the provision of the next model of heavy infantry tank and this cost us dearly in the last year of the war. These three lessons show clearly the necessity of having one directorate or body whose object is to produce the particular type of unit required and which deals with every part of the work of forming and equipping these units efficiently. Let it be clear that the activity of these directorates must be definitely limited to building up efficient units and advising on their employment. Suggestions are often made that they will interfere with the co-operation of these units with other arms. The exact opposite is true. The better the weapon is forged, the sooner it can be handed over to the user. It is difficult to see any disadvantage or argument against this decentralisation to directorates controlling everything which concerns the well-being of their particular activity.

The Revival of the Art of War

THE WISH IS FATHER TO THE THOUGHT

REFERENCE was made in Chapter 2 to the vital importance of the defence of Great Britain, and of London in particular as the focal point of our maritime communications. The loss of some colony or foreign possession might be a disaster, but the damage would not be irreparable; the loss of Great Britain, however, would obviously end the existence of the British Empire, at any rate for the time being.

At the close of the First World War such thoughts were far from the mind of the people. As far as the Army was concerned it was freely suggested that this should be designed for colonial warfare as there would never be a repetition of this type of war. Even the Navy, which had always held first place in the eyes of the nation, was allowed to shrink to a dangerously low level.

There were two main thoughts in the mind of the public during those years which followed the close of the First World War. First of all, the nation was quite determined to avoid a repetition of the type of war which we had seen waged on the Western Front from 1914 to 1918. People revolted at the thought of the mere possibility of another war of this nature. It was no use pointing out that we had ended the war with one of the finest armies in the world and that the success of the final offensives was largely due to the action of the British troops, and further that the enemy had to be worn down by a policy of attrition before such a success could be achieved. The thoughts that were uppermost in people's minds were what appeared to them to be the futile attacks with endless casualty lists, and all the painful horrors and distress of that form of warfare. Never again was the thought of almost everyone in the Empire when they considered such subjects.

This was their main thought, but it was closely followed by a second thought that we had ceased to be an island in so far as warfare was concerned. The daily growing danger of air attack could not be set aside. During the war we had been comparatively immune because the enemy aerodromes were a long way off and the radius of action of those early types of bomber aircraft was limited. This radius of action was rapidly increasing, but we would still have remained comparatively immune for some time if the Germans could be kept behind the Rhine. Actually, of course, there was no immediate danger from disarmed Germany. France had a powerful air force, but war with France was unthinkable. Everyone realised, however, that Germany would one day be re-armed and we would then have to face this new threat to our insular security. The French would not be able to keep the German aerodromes behind the Rhine without our help on land, but that might well drag us into a form of warfare which would become a repetition of the Great War.

Here then was a dilemma. We were terribly anxious to avoid becoming engaged in another continental war, but we were equally anxious about the threat of aerial attack. How could we deal with this unless we went to the assistance of the French on land?

It was at this stage that a wish became father to a thought. The Air Force came to the front with some entirely new proposals. They claimed that they were introducing a new form of warfare by using the third dimension. The whole of the enemy country would be open to attack instead of just a stupid little strip where the military forces met. As warfare depends on the will of the people the source of that will would be attacked at once. This would be done by bombing attacks on the heart of the country. Land warfare was limited to fighting along the front and was like hitting a man on the skin till he bled to death. By using air warfare you could attack the heart at once. These were the views which the air staff preached. Moreover, warfare of that nature would be handed back to a comparatively small professional air force. The rest of the country would, of course, be heavily engaged in aircraft manufacture, but except for this and shipbuilding, they would pursue their normal lives, instead of being conscripted into the Army and killed in hundreds of thousands. It is small wonder that the air force propaganda of this nature succeeded. No more attractive wish ever became father to the thought.

In support of their views the Air Staff pressed for the raising of a great fleet of bomber aircraft. They also demanded and obtained a separate ministry, service and staff for the control of this new form of warfare. There were, of course, other types of aircraft needed, such as co-operation machines for the Navy and the Army, and fighter aircraft for defensive purposes; all these activities came under the new Air Ministry, but it was the bombing squadrons on which the Air Staff expended the greatest effort and expenditure. It was this striking force of bombers that was to force our will on the enemy and thus avoid all the slow, expensive and out-of-date methods of land warfare.

The General Staff of the Army never accepted these views. In the early days, just after the Great War, their views were perhaps a little pedantic though sound. They considered that the Air Force should be regarded as a new arm and not a new service, and that it was a complementary and supplementary arm. Action from the air could do no more than contribute to the success of the side and could not by itself achieve victory. They pointed out that the surface of the earth is the decisive plane. The Army and the Navy each had their sphere of action on that plane to which the action of the Air Force was complementary. What happened in the air was of no importance in itself; it was the effect on the surface of the earth that mattered. It was obvious, of course, that a powerful bombing fleet was needed. If this country was to be bombed we had to have the necessary powers of retaliation.

Let it be quite clear that the General Staff of the Army never for a moment doubted the value or importance of the development of a powerful Air Force, but they pressed equally for a balance to be drawn between the Army and Air Force requirements. They considered and stated that in their view future wars would be won by the co-operation of military and air forces, and not by the independent employment of the air arm. These views have, of course, been substantiated in the Second World War.

During this period the Air Staff were so intent on the building up of a powerful bombing fleet that the development and provision of fighter aircraft were sadly neglected. They looked on these as defensive weapons and far less important than the bombers which formed the offensive arm of the Air Force. The lack of defensive aircraft was not appreciated by the nation for a considerable time. It is no exaggeration to say that at that time the greater part of the

public had some sort of idea that in the event of air attack our bombers would go out, rather like Drake's ships put to sea, and meet the enemy bombers. The latter would then, no doubt, drop like ninepins and die a horrible death in the Channel. The public had no conception of the fact that bombers do not fight enemy bombers for the simple reason that they would never find each other in those great spaces in the air and that their value for the defence of this country against aerial attack was limited to that of retaliation. Fortunately this policy was revised at a later date, and increased numbers of fighter aircraft were put into production at the expense of some of the bombers. Even then we were very short of fighter aircraft at the outbreak of the Second World War.

This policy of the provision of a great bombing fleet at the partial expense of other types of aircraft was supported for many years after the First World War by further claims. These claims, which could not be accepted by the other services, were often made in public utterances. For instance, several claims of this nature were made by the Chief of the Air Staff at a public lecture at Cambridge in 1925. This practice has now, fortunately, ceased and the three services confer together and succeed in agreeing on most issues, but it is mentioned here as it was a serious additional handicap in arriving at a sound and agreed policy between the services at that time. As instances, it was claimed that Iraq and Palestine were controlled by the air without occupation; whereas the military forces which existed in these countries were quite essential in this work. When trouble arose later it was military and not air forces which were demanded as reinforcements. Then again, claims were made that coast defence against enemy battleships could be carried out more effectively by aircraft than by guns; and that the existence of great battleships was doomed by the development of bomber aircraft. The General Staff of the Army were quite ready to agree that these views might come true later, but they considered them unsound as a basis on which to build up our defence forces in 1925. It is to be hoped that the public expression of views which cannot be accepted by the other services has ceased for ever.

At this stage the reader may be thinking that the criticisms implied in this chapter are mainly destructive. If we had not put our faith in a great fleet of bombers to force our will on the enemy, what alternative was there to suggest? Would it have been possible to accept a commitment to raise a great army for another con-

tinental war against the wishes of the nation? This question can be answered by saying that the Army should have explained the true position to the nation. The exchange of memoranda between the Ministries or the appearance of a few articles in military journals explaining the half truth of the Air Force propaganda of that period was not enough. Some public utterances by important personages were necessary, and this could surely have been arranged. The public of this country have a knack of knowing the truth when they hear it, but the Army never told them.

Actually there was a better answer than this. The methods of warfare were changing, and for once the Army was well to the fore in these new developments. There was every possibility of a quick success on land by the use of these new methods, and the public could and should have been educated out of their preconceived views that another terrible war of a similar type to that of the First World War was inevitable if we accepted a commitment to fight on the continent. All this, however, is discussed later.

Looking back, I think it was perhaps fortunate in some ways that we made some of these mistakes. We are a very lucky Empire. Logically the Air Force should have remained under the Army except for the naval wing, but would the War Office ever have been able to build up such a magnificent service as the R.A.F. proved itself to be? Could the War Office have adapted itself to the development of a combination of mechanical forces and powerful air forces, and cut down all the remaining dead wood which cluttered the Army? Would they have accompanied this with the necessary publicity to carry the public with them? I feel very doubtful about the answers to these questions during the period after the First World War. Meanwhile we must consider in some detail these ideas that were arising to revive the art of war so that quick campaigns could be fought and won in land warfare.

Attempts to Revive the Art of War after the First World War

The art of war has gone through many phases during various periods in history. At times this art has risen very high and great campaigns were won quickly and decisively. Such campaigns paid well. At other times the art of war has sunk very low and many years of fighting were required before any decision could be reached.

Such wars have usually been as detrimental to the victors as the vanquished.

The First World War belonged, of course, to the latter class. If the power of attack is reasonably strong compared with the defence, then the art of war is high, and vice versa. That war coincided with a period when the power of attack was almost negligible compared with the strength of the defence. It was no fault of the generals that they were in command at this period. Attacks supported by overwhelming artillery support made some headway, but the power of the defence soon reasserted itself and the advance came to a standstill. It is not necessary to waste space in this book by describing the change that was brought about by the introduction of tanks, which was mainly due to the work and foresight of Major-General Sir E. D. Swinton. Those early tanks were rather crude machines, but even then they served to stimulate new ideas for resurrecting the art of war. They pointed the way to raising the power of the attack compared with that of defence. I happened to be connected with tanks from the earliest days, and wrote a paper at Headquarters Tank Corps in France to try and clear our views about the eventual development which would follow from their introduction. The paper was written in November 1916. It was a crude attempt, but it was certainly the first paper ever written foreshadowing the use of mechanised armies of all arms using tanks and tractors. It foresaw tanks travelling at high speeds with thin armour and slower types with armour many inches thick. When this was written only a few tanks had yet appeared on the battlefield and crept forward laboriously at two or three miles an hour. Although we were limited to these slow tanks for most of the war we saw quite clearly that we needed two types of tank. Armies had always been divided into two types of troops. There were the fast mobile troops whose duty it was to feel out and find the enemy and work round his flanks and attack him where he was weak. This work had always been done by light cavalry. Then there were the slower moving, harder hitting troops whose duty it was to hold or break through strong positions. These troops had always been infantry formations. Both these types of troops needed assistance from the tanks. Fast and less heavily armoured tanks were needed to help the mobile troops corresponding to the light cavalry and heavier but slower tanks were needed to help the infantry corresponding to heavy cavalry in the past. This

became our definite policy and we had both these types of tank before the war ended.

After the war this whole problem of the employment of tanks and mechanised forces received much attention, due very largely to the work of Major-General J. F. C. Fuller, who wrote profusely and very attractively on this subject. The Army owes much to this officer who received little credit for his work. Captain Liddell Hart was also a great help to our cause by writing widely on this subject. No great advance was made, however, for some years. Most of the tanks used during the war had been very slow and heavy and designed specially for trench warfare. They would have been quite useless in the early stages of a war, in any form of mobile warfare.

New designs of tanks were therefore produced; they included the Vickers tank Marks I and II, which proved to be a remarkable advance in tank design. The tank was, however, still a comparatively large target with rather thin armour. It was vulnerable to armour-piercing bullets and it seemed likely that comparatively light anti-tank weapons would be able to defeat the tank. There were many prophets who foretold the death of the tank.

The next step forward came in 1925. In that year the light tank made its first appearance. It started as a very simple one-man tank. It was considered, however, that this put too much strain on one man and it very soon became a two-man tank.

I made the first of these small machines myself. It did not possess any particular merit in design, but it served to start the idea and show what could be done with small machines of this nature. However, it attracted the attention of a very clever engineer, Sir John Carden, who then took up the design of these small tanks and did some very fine work. The idea was briefly this. The comparatively large and lightly armoured tank of the Vickers type was definitely vulnerable to light anti-tank weapons. As these tanks cost many thousands of pounds, they could not be made available in very large numbers. There was, therefore, every likelihood of a large proportion of these tanks being knocked out in an attack and the whole advance being held up.

Looking back for a parallel we realised that the infantry used to advance in close order. Then the rapid loading rifle was invented and caused them heavy casualties. The infantry therefore had to adopt dispersion and advance in extended order, and by doing so they were enabled to advance against the magazine rifle.

The proposal was now that we should "disperse" the tanks, which cost many thousands of pounds, into a considerable number of light tanks which only cost a fraction of that sum. In that way the tanks would advance in greatly increased numbers, in much the same way as extended infantry had succeeded in advancing against rifle fire. Some of these tanks would, of course, be stopped by the enemy anti-tank weapons, but sufficient should get through to ensure success.

The general idea was that a large proportion of infantry should be converted to units, using these small tanks, which would advance in waves through the enemy lines. The idea was at first received with acclamation. It was propounded in articles in most of the military journals.

The Royal Tank Corps, however, did not agree with these views. They wanted the fairly large tanks that would cross difficult obstacles and provide a steady gun platform so that they could use their armament with accuracy on the move. They wanted large numbers of such tanks and in this they were quite right. But it seemed very unlikely that the country would pay for this at that time. The choice was not between the same numbers of small or larger tanks, but between small numbers of large tanks and large numbers of small tanks. However the Tank Corps did want a light tank for reconnaissance and for giving covering fire for their main tanks. These small machines were therefore redesigned to take three men and a fine light tank was produced for this purpose.

This production of a good type of three-man light tank for use in the Royal Tank Corps was one decisive result from this early work with small tanks in 1925. They needed these light tanks for reconnaissance and covering fire. At the same time the infantry were thinking much more in the direction of some means of bringing machine guns up to the front so as to be able to use them for really close support in the attack. This was the other direction along which these small machines were developed, and this type became known as the machine gun carrier. In a very short time the Mark VI Vickers Carden machine gun carrier was produced which proved to be a very successful machine. This machine was only lightly armoured and there was no intention of using it like a tank in and among the enemy, but it could perfectly well advance with the leading infantry, moving from cover to cover and giving them really effective close support. At times the machine gun

would be dismounted, after arrival, and used on the ground. At other times the carrier could take cover behind a hedge or a crest and the machine gun was best fired from the machine. The gun was not fired from the machine on the move except in emergency.

These were the ways in which we were feeling our way forward in the development of armoured and mechanised warfare. In 1927-28 the Mechanised Force was formed on Salisbury Plain. It was a small affair of one tank battalion of medium tanks with some light tanks for scouting and a corresponding proportion of infantry, artillery and engineers attached. The latter of course were mechanised. It is not proposed to dwell in any detail on this work of development. The force was commanded by Brigadier R. J. Collins and it carried out very interesting and valuable work. In miniature it was not unlike the armoured division of to-day. In fact many of us had the idea at the time that the next step should be to form a mechanised or armoured division which would have one or two armoured brigades and one or two infantry brigades (mechanised) and the other supporting arms.

A new idea, however, arose in 1928. It became known as the "all-armoured idea." Up to this time we had put our faith in the co-operation of all arms, but now the main idea was that the armoured forces should go right through the enemy positions and break up their headquarters and rear organisations. For this purpose all the vehicles would have to be armoured and the bulk of the work was to be done by tanks. With this in view the first thing to do was to develop and train a brigade of tanks as the tactical formation. This work was put in hand and made rapid progress on all except the material side. The whole idea had been propounded in 1929 by the issue of a manual called *Mechanised and Armoured Formations*. This book had been popularly called the "Mauve Manual" from the colour of its cover. In 1931, however, practical trials were started. The second, third and fifth tank battalions were collected on Salisbury for this purpose under Brigadier C. N. F. Broad, who had been largely responsible for these new proposals, and a fourth unit was improvised as a light tank battalion. The training in that year was very largely concentrated on learning how to manoeuvre and handle a force of this nature. Wireless was the normal means of communication, but lamps and coloured flags were used instead at times.

In 1932 these units were again concentrated under Brigadier

K. M. Laird and further progress was made. It became clear that on suitable ground a formation of this nature was quite capable of sweeping aside opposition in moving warfare and carrying out the traditional role of the mobile troops of bygone days.

No trials took place in 1933, but it was decided to form these separate tank units into a tank brigade with a proper organisation, and in 1934 they continued their training under Brigadier (now Major-General) Sir P. C. S. Hobart. This officer had long supported and helped to develop the policy that was now in force as regards the employment of tank brigades for mobile warfare. The brigade made rapid progress under his leadership. He continued to be handicapped by lack of progress on the material side, but it was clear that tanks of the type which he visualised for this work would eventually become available. Given such tanks the trials showed that armoured brigades consisting of a mixture of light and medium tanks and covered by a screen of light tanks would provide the basis of armoured formations which might well prove capable of sweeping away opposition in mobile warfare provided their use was confined to suitable ground.

The next step was to group tank brigades into a higher formation. It was here that the difference became apparent between the two sets of views. The all-armoured adherents wanted an armoured division consisting mainly of tank brigades. If they had much in the way of infantry or artillery in this formation they feared that they would not be free to pass rapidly through or round enemy positions and to attack him in rear. They realised that they would want assistance from the other arms if they had to fight their way through a piece of difficult ground, but they counted on being able to obtain and send up special troops for such purposes. The other group that put their faith in the co-operation of all arms at all times argued that it was far better to have an armoured division with one or two tank brigades and also the right proportion of other arms permanently in the division. They did not consider that this would hamper the movement of the armoured forces. On the contrary, they considered that instances would constantly arise where the tanks needed this co-operation and that by using this their speed would be increased and not retarded.

We now know that the latter view proved correct. We were definitely hampered in many ways in those few years before the outbreak of the Second World War by the adherents of the former

view and our failure to train sufficiently in the co-operation of all arms. This chiefly affected the organisation and training of the Armoured Division. The tank brigade would in either case have to fight by itself at times and the training which was carried out on Salisbury Plain in handling this brigade and its units on the field rose to a high level. They lacked, however, the training in being relieved by and co-operating with the other arms when necessary.

While all this work was being carried out, steps were being taken to motorise all the ordinary divisions. By 1935 all first line transport of normal formations was either motorised or this was in process of being done. The main effect of this change was that any normal formation could be moved a hundred miles in one day if the marching men were carried in lorries or buses. Moreover, plans were made for the supply of troops carrying vehicles for one infantry brigade in each division, so that at least one brigade should be immediately mobile. All this work materially altered the fighting power and mobility of the normal formations.

The Position we had Reached by 1935

At this stage it may be well to summarise the position which we had reached by about 1935. The field force at home was rapidly becoming a completely mechanised striking force. The mobile portion of this force, representing the independent cavalry of bygone days, was to be one or more armoured divisions. The remainder of this mechanised striking force was to consist of normal formations which had full support from such weapons as machine gun carriers and all their first line transport was motorised; in addition sufficient troop carrying vehicles were to be provided to take one-third of the dismounted personnel at one time. This was a force of an entirely different nature to the normal formations of continental armies. It was on the development of this mechanised striking force that we pinned our hopes of reviving the art of war and raising it from the low level to which it had sunk in the First World War.

During all this time the position of the Army as a whole was, of course, constantly under review. The Cabinet had to be satisfied each year that the country needed the armed forces for which it was paying. These consisted of several different portions. First of all there were the troops used to guard our foreign possessions and

our naval ports which are essential to our maritime communications. No one has ever questioned the necessity for these troops. Then there were the troops necessary for the coast and anti-aircraft defence of this country and again the necessity for these was never doubted. A third requirement was the retention of a reserve at home or in the Middle East, to assist our small garrisons abroad if they should be hard pressed in the early stages of a war. This was generally accepted by the politician, but it was usually argued that quite a small reserve of regular troops would be sufficient for this purpose.

When it came to pressing for the retention at home of a powerful mechanised striking force, the politician took quite a different line. It has already been explained how both the politician and the country as a whole were enticed over to the view that the Air Force could solve all our problems of home defence and would bring the necessary military pressure to bear on the enemy if that were needed. The reply of the General Staff of the Army to these views has also been explained, but it appears to have carried little weight. In spite of this the Army pursued a policy of transforming the field force at home into a mechanised striking force. Such a force would be very valuable to supply reinforcements overseas in many places where we had military commitments, and the existing forces at those places were being gradually mechanised to increase their value and reduce their annual cost. To meet the threat of another continental war the General Staff hoped to produce a mechanised striking force of four or five divisions and one armoured division, and after that, at least a portion of the Territorial Army was to be mechanised on the same scale so as to be available at an early date to support the regular troops.

This was the hope and ambition of the Army, but it never materialised. The plans were made and the necessary trials carried out, but the funds were never made available for the purchase of the equipment. It must be confessed that there were serious lapses on the experimental and design side which cannot entirely be excused by financial restrictions, but the whole outlook during this period was so depressing for the Army that it is small wonder that these mistakes were made.

It is of interest to note that continental armies were pursuing a similar course during this period, and they often copied our ideas. The great French and German armies were, of course, making use of mechanisation, but in their case it was only a comparatively

small part of their armies that was being turned into a mechanised striking force. In other words, great foreign armies consisted of two types of forces. There was the comparatively small mechanised striking force, which consisted of armoured or motorised divisions and had a high degree of mobility and hitting power, and then there were the ordinary divisions which might be called line holding troops. France had at that time some eight* divisions which were armoured or motorised and could be formed into a mechanised striking force, and in addition about six times as many divisions of the normal line holding type. The latter used horse transport almost entirely and this would give them quite sufficient mobility for their purpose. At that time Germany was aiming at raising some ten armoured divisions and an army of about a hundred divisions of the normal type using mainly horse-drawn transport. The main reason why these armies were limiting their mechanised forces to these numbers was the great expense involved in the provision of the equipment and the fact that it was not easy to train a short service conscript army in this work. With us, where we had in any case to have the regular troops, the difficulty in training was not so serious, moreover, as our army was small and costly the proportional additional cost for the provision of the mechanised equipment did not loom so large. In fact for a highly trained and expensive regular army the refusal to supply the best possible equipment could not be excused on any grounds.

It will be seen at once that if we had been allowed to raise our mechanised striking force of some six divisions at home, we could have been able almost to double the striking force available between the French and ourselves. This would have been a very valuable military asset. It would have been a far greater assistance than that of the six normal divisions which we added to the French sixty divisions in 1914. Their main value depended of course on their being instantly ready for war. This meant the provision of the full-scale equipment in peace time, which entailed a capital cost of four or five million pounds spread over a period of about eight years. This expenditure was refused, and although we continued to train and think in the terms of a mechanised striking force, our army remained unequipped and unable to take part in any military commitment without a long delay. It is very probable that if we had possessed this force, fully equipped and ready for war at the

* The official figure was eight, but it is possible that this was exaggerated.

time of the crisis in September 1938, the Second World War would never have materialised, or alternatively we would have called their bluff and advanced into the Rhineland with the French. At that time the Germans were holding a defensive position on the West with the minimum number of troops and facing the French army of forty-five divisions. The latter had mobilised at 100 per cent strength and were in very good heart. The Germans had no permanent fortifications on their side and the Siegfried line was a mere pretence at that time. With the assistance of our Air Force and a mechanised striking force the French would have reached the Rhine in a very short time and the death knell of dictatorship might well have been sounded for ever.

This was how the Army had planned to revive the art of war and show the country that an army was still an essential part of our defence forces. All the stupid nonsense that had been talked about the strength of defence being irresistible in modern war would have been disproved. With equal strength on each side the defence has always beaten the offence, but with good strategy the offence elects to hit the defence with very superior numbers. This is what would have happened if we had attacked the Germans on the Western Front in September 1938 while they were heavily engaged in the East. Equally the nonsense about wars not paying and being as costly to the victors as the vanquished would have been discarded. Such a war would have cost us a few millions and would have saved us incalculable sums. Let us hope that the politician will listen a little more closely to the soldier in the future, and equally let us hope that the soldier will take the trouble to educate the public in these matters and thereby help the politician who is dependent on public opinion.

It may be of interest to record the views that were held by the more progressive elements in the Army in about the year 1936. These views were expressed later in the *R.U.S.I. Journal* in March 1937, which recorded a lecture which I had given on 20th January, 1937. We definitely retained the policy which we had formed during the First World War of having two types of tanks; a fast and less heavily armoured tank for the mobile warfare and a slower and heavily armoured machine to assist the infantry in the heavy fighting. As regards warfare generally it was considered that the attackers would organise their offensive action in three waves. The first wave would naturally be carried out by the Air Force. In

addition to reconnaissance, the Air Force bombers would attack all nodal points in communications leading to the front under attack. In this way the arrival of reinforcements and supplies to the threatened front might be completely stopped. Such points might include bridges over rivers, centres of railway communications, etc. In addition continual air action would be carried out against any reinforcements which were marching or being bused up to the front. In other words, the Air Force would hold the ring while the Army advanced, and prevent the enemy from sending any reserves or supplies to the front.

The second wave would consist of the mechanised striking force. After the initial break through this force would advance at high speed and attack and break up centres of resistance and thus prevent the enemy from re-establishing the front. In most offensives during the First World War the attackers had succeeded in the initial advance, but after that the defenders had been able to re-establish a defensive position and the whole offensive had to be restaged. It was considered that the mechanised striking force used as this second wave would keep the defenders moving and prevent this stabilisation.

Then the third wave would be the advance of the normal divisions which we have elsewhere called the "line holding divisions." These would inevitably have to advance more slowly. The ground would have to be cleared of enemy pockets which might still be holding out. Communications would have to be restored. In this way the third wave would advance and secure the gains.

If the warfare started with the armies entrenched on each side, the line holding divisions would of course have to make the initial break through. These divisions were therefore essentially line holders and line breakers. For this purpose they would obviously require the assistance of the heavy infantry tanks mentioned above.

The reader may care to compare these views recorded early in 1937 with what actually happened in France in 1944. The similarity is reasonably close, including the necessity for the heavy infantry tank.

It may be argued that all these proposals which were being made ignored the fact that the Germans would eventually construct defensive lines similar to the Maginot Line. We have already seen that we would have had a chance to advance into Germany before

such lines were constructed if only we had raised the necessary forces beforehand, but it was perfectly true to say that we would eventually be faced with such lines. This, however, was no more than a revival of the conditions that developed during the First World War. When the Germans constructed their great defences on the Western Front in that war, many officers expressed the view that they were almost impregnable and that it would be better to try and go round by the Balkans. Those defences included very big trenches with concrete pill-boxes and deep dug-outs and presented a very formidable line. Yet the counter to these defences was produced. As everyone knows it was the tanks which appeared in 1916 that provided the answer and it had taken two years to develop and produce them. With the aid of these machines, the lines that were thought to be impregnable were easily crossed.

The Siegfried defences, which were begun by Germany in 1937, presented an almost exactly parallel case. We raised the point at the War Office in 1936 and pressed that this time we should make the necessary preparations in peace time to cross such lines, as they were certain to be constructed in war. Nothing was done, however, about this, probably because we were already so far behindhand in many other ways due to the financial stringency between the two wars. We had, however, to tackle this problem for overcoming the defences of the Atlantic Wall in 1944 and sure enough all the necessary devices and special tanks were prepared and the defences were breached with little difficulty. Modern engineering has made it possible to overcome the strength of almost any type of static defence unless it is heavily manned.

The Part to be Played by the Armoured Forces

So far we have dealt with our attempts to resuscitate the art of warfare and we have recounted the events up to about 1936. The main policy and the role of the Navy in the defence of our Empire had never changed. Perhaps it never will, but we allowed the strength of the Navy to fall to a dangerously low level and we lost control of the maritime communications in the Far East as a result. As regards the Army and the Air Force there was a complete change of policy. We saw how the Air Staff succeeded in persuading the nation that a great bombing fleet would not only provide for our security, but would also enable us to bring pressure to bear on an

enemy and force him, if necessary, to accept our will. The Army was reduced to a mere skeleton.

We have already suggested that the Army was still the vital factor in land warfare, acting in co-operation with air forces. As regards this country, our share was the provision of a highly trained mechanised striking force, and as the armoured forces were an essential part of this force it may be of interest to follow the further development of this arm up to the time of the Second World War. We have already admitted some failure over the vital questions of the development of tanks and munitions of war during the quiet periods. Here we get a useful lesson for future reconstruction. At every stage the General Staff of an army should be certain that there is one model of every munition of war which is ready for mass production if war becomes imminent. There will always be improved models under trial which can come into the production stage at a later date, but there should always be one model complete in every detail and good enough for immediate requirements which can be released for production. During all this period up to 1937 or even later there was hardly a munition of any kind that could be freed for production. There had been plenty of time and money to produce pilot models in field and medium artillery, but nothing was ready.

As regards tanks the position was very bad. During all these years the Tank Corps had been equipped with the Vickers medium tank Mark I or II. The tank had been a great success, but by this time it was already ten years old and out of date. The armour was no longer proof against armour-piercing bullets from rifles. A new design of tank had been designed by Messrs. Vickers in the meantime and several models appeared during 1929 and 1930. This was a definite step forward in design and had two subsidiary machine gun turrets in front in addition to the main turret, which had a two-pounder and Vickers machine gun coaxially mounted. This tank became known as the "sixteen-tonner," though its weight was slightly above this figure. It had thicker armour than the Mark II Vickers tank, but was still not entirely proof against the latest types of armour-piercing bullets from small arms.

About this time the financial crisis took place and any question of rearmament with more expensive tanks had to be postponed. The sixteen-ton tank had been developed during a very successful period under Major-General S. C. Peck. During the succeeding years

we were far less successful. It is true that this period included the time of the financial crisis, but it would have been quite easy to keep one or two experimental models up to date on the lines of the sixteen-tonner in anticipation of the day when funds would again become available for the rearmament of the Army. Instead of that, the main efforts were concentrated on an inferior type of medium tank. This was not the very simple type of tank which could be produced and used in large numbers which had attracted so much attention in 1925; nor was it the superior type of machine by means of which the Tank Corps counted on being able to meet and defeat enemy anti-tank weapons even though they might not possess very large numbers of such tanks. In other words, these medium tanks developed during this period between 1932 and 1936 fell between two stools. They were neither one thing or the other. As a result of the leadership on the technical side during this depressing period, the Tank Corps were never rearmed with medium tanks, and the Vickers Mark I and II tanks which were constructed soon after the Great War remained as the main armament of the Tank Brigade for eighteen years.

In 1936 funds began to become available again for the Army, though there were still plenty of delays caused by financial stringency. The rearmament programme for the Army was launched on a definitely limited scale. Only, very slow progress could, however, be made due to the lack of approved and tested models which could be launched into production, and this affected nearly every type of munition.

As regards tanks and all the fighting vehicles we were faced with the greatest difficulties. First of all the only fighting machines ready to go into production were the light tank and the machine gun carrier and the first attempt at an infantry tank. The former had been allowed to develop into a very complicated machine, which was not at all easy for mass production; in fact it took two years to overcome the manufacturing difficulties on a production basis before these tanks could be turned out in any large numbers. The infantry tank was a creditable attempt to fill a growing demand, but as this machine was a first attempt at an entirely new idea it rather naturally fell a long way below the requirements of the troops and was not good enough as a model on which we could launch out into large-scale production. It will therefore be seen that there was very little in the way of finished models which we could use for the

rearmament programme for which funds were now becoming available. It is always distressing to have to start a rearmament programme by designing and developing your pilot models, but that is what we had to face. Furthermore, the science of tank design was in a very fluid state. It was not possible to go into production from the drawing board; any attempt of that nature would have been crowned by disasters. Tanks had changed in a few years from simple and slow machines to vehicles using powerful engines and entirely new types of transmission and suspension. There was inevitably a great lack of knowledge and experience about these new systems. It was not like gun construction or even aeroplane construction where there are far fewer unknowns. Nor was it possible to go into production on an older design. An older design of gun can always be used, but with tanks there is a constant fight between the tank and the anti-tank weapon, and the margin is always small. If the tank is not of the latest design it may be easily defeated by the anti-tank weapons or obstacles, and it may then become a complete waste of money to build it at all. This was the position which faced us at the end of 1936. There was no alternative but to develop new models. Moreover, owing to the unknown engineering problems involved, no one in the past had succeeded in designing and developing a new model of tank and getting into production in less than four years, and it had often taken longer than this. The French had taken eight years to get into production on their Char B tank, which was their best machine. We obviously could not face a delay of even four years before production. Pilot models had therefore to be rushed through at top speed and great risks had to be taken in going into production at a very early stage.

We had, however, to do the best we could in 1937. There were many problems, but the main ones were the production of satisfactory models of infantry tanks and tanks for the armoured division. Having had some experience with the Mark I infantry tank the requirements in that direction were fairly clear. We settled at once on a tank with one two-pounder gun and one machine gun and armour to withstand the attack by a similar tank. This meant armour about 60 mm. thick. No great speed was needed and a couple of standard heavy oil engines could be employed. The design work was soon completed and a very satisfactory pilot model was built in just over a year which then went into production with certain modifications. This tank came to be named the Matilda.

The production problems were, however, very difficult. Firms had to be educated in the production of armour of this nature. The tank was a heavy one weighing some twenty-four tons and there was much machining to be done on the armour plate. It was some time before any great progress was made with these production problems.

As regards our second main problem, namely the development of suitable tank models for the armoured division, there was much controversy. After some delay a pilot model was started which aimed at fulfilling the requirements of the Tank Corps. This was a large and expensive machine and it would take some time to make the pilot model.

In the meantime I had seen the American Christie tank performing in Russia at their manœuvres. Large numbers of these Christie tanks took part and put up a most impressive performance. The great feature of this tank was the system of suspension which enabled it to absorb quite large obstacles, and I was determined to adopt this feature in our future tanks for the armoured forces.

On returning to England we found that we could buy one of these tanks from America, and with the help of Lord Nuffield's organisation we proceeded to do so. The transaction was arranged on the phone and there were many minor amusing incidents, such as clashes with officials on both sides of the Atlantic. It was, in fact, a very strange deal for a Government transaction, but we were determined to brook no delay and the tank was sent across and was running at our experimental establishment within a month. It became obvious that the tank would need considerable alteration before it could be accepted as a satisfactory fighting machine, but the suspension could be copied almost exactly, though very large and special shock-absorbers would be needed to steady the movement and produce the effect of a steady gun platform for shooting on the move. At first we only aimed at producing this tank as a fast and light type of medium tank. The work went ahead at full speed in a factory that was specially built for this work by Lord Nuffield, who had taken a great personal interest in this tank from the start. His vice-chairman, Mr. Oliver Boden,* provided the driving force and under his leadership no obstacle was allowed to cause delay. There were the inevitable troubles with an entirely new tank of this nature, and some of these were of a serious nature. The tank was a fast machine capable of speeds up to forty miles an hour and which could be driven at high speeds over natural cross-country

* Replaced later by Sir Miles Thomas.

obstacles. This had been achieved in the Russian Christie tank by using thin armour and a very small and cramped fighting body which reduced the weight of the tank. This was no use to us and our pilot model was a properly designed fighting vehicle which inevitably weighed much more than the Russian model. This extra weight imposed certain new strains, especially with a high cross-country speed. However, the mechanical troubles were eventually surmounted and we got into production in two years. This had never before been achieved when dealing with a completely new model which introduced such radically new ideas.

As we began to overcome our mechanical difficulties we became bolder and we increased the thickness of the armour up to 30 mm. These tanks, which were of medium weight and size, came to be called cruiser tanks. They had a two-pounder gun and a machine gun mounted coaxially in the main turret and some of them had an additional machine gun mounted in front.

These were the ways in which we overcame the problems of providing tanks for the armoured division. The aim was that all the tanks used in these divisions should have armour on a 30 mm. basis. This would enable the division to ignore such weapons as anti-tank rifles and heavy machine guns. When meeting actual anti-tank guns like our two-pounder gun, they had to depend on their own fire power.

The Tank Corps, which had now become the Royal Armoured Corps, were quite convinced that they were what they wanted, and that by using tanks with these qualities, they would be able to overcome the anti-tank defence in mobile warfare. Although the plans to provide these machines were only started in 1937, the first armoured division had seventy of these cruiser tanks by the autumn of 1939 when the Second World War started. This was a fine performance and mainly due to the drive provided by the Nuffield Mechanisation factory.

We have now followed the tactical development leading up to the armoured division and the way in which it was equipped with cruiser tanks at the last moment. One division was in existence, though only partially equipped on the outbreak of the war, and two more were to be formed. They still contained a large number of light tanks, which had to be used until larger numbers of the cruiser tanks should become available.

It must of course be appreciated that the armoured divisions

were only a portion of the mechanised striking force which we had always hoped that the British Army would supply. Armoured divisions alone could achieve little without the support of divisions which could follow up rapidly and secure the gains. In this direction our Expeditionary Force was well found. Every division had motorised first line transport and a troop-carrying company to carry the dismounted personnel of one infantry brigade. In addition we formed three motorised divisions in the Territorial Army, and I had the good fortune to take the first of these—the 50th Northumbrian Division—to France in January 1940. The motorised divisions were roughly two-thirds of the size of ordinary divisions. They contained two infantry brigades and two field regiments of artillery instead of the three contained in a normal formation. There was a troop-carrying company in each brigade, with a section which worked with each battalion. In this way the units became quite used to embusing and debusing without any complicated pre-arrangements and they would mount these vehicles and be off with hardly any delay. There was much criticism of the fact that the division contained only two infantry brigades and was not, therefore, interchangeable with a three-brigade division in a defensive line. The answer to this was that these motorised divisions were never intended to hold a defensive system for any length of time and the third brigade to form a divisional reserve line was not therefore needed. The important point was that two motorised brigades were as big a force as could be handled and manoeuvred on a divisional front without causing congestion and offering good air targets.

On the outbreak of the war we had one armoured division which was partially equipped and four divisions with motorised transport. The Territorial Army had nine more divisions and three motorised divisions, but they had practically no equipment. If we had possessed the two armoured divisions fully equipped and the four divisions with two or three motorised divisions working together and trained as a mechanised striking force in the September crisis in 1938 the history of the war would have been very different. As it was the British Expeditionary Force had to come out piecemeal and drifted into line-holding duties alongside the French Army. No attempt was made to keep this fine material and excellent body of men as a mechanised striking force in France ready for future operations.

We have now examined the British views on the evolution of a mechanised striking force. We have seen that the employment of tanks with this force fell under two heads. First of all we had the tanks of the armoured divisions. These were tanks with a medium thickness of armour but a high speed and providing a good gunnery platform for shooting on the move. Then we had the infantry tanks with very heavy armour capable of resisting the fire from all anti-tank weapons, but limited in speed and radius of action. These were for use with infantry for breaking through strong defences. It may now be of interest to consider the views which Germany formed and the consequent action which they took as regards tanks, during this period leading up to the outbreak of the war.

Germany had been very attracted by our proposals made in 1925 to use great numbers of simple cheap tanks to pave the way for a rapid advance by a mechanised force. She was not able to do very much at that time as the Versailles treaty was still in force, by which she was not allowed to build or use tanks. Some years later, however, Germany began to ignore the treaty and built her tanks. She decided to use very large numbers of small and simple two-man tanks as her main armament, very much on the lines that we had suggested in our military journals in 1925 and 1926. Germany realised full well that a nation starts a war with the armament that it can afford to build in peace time. Before the Second World War she had to watch her position as regards foreign currency. There were many materials which she had to import. She could not at that stage build unlimited numbers of expensive tanks. Moreover, Germany realised the great importance of training and evolving the right technique for battle. How can you do this while the troops are waiting for their equipment? She therefore went straight ahead with simple cheap tanks which she knew she could make without delay. She had about twenty armoured divisions in training and fully equipped with these simple machines before the war broke out. This enabled her to develop her technique for armoured warfare in a way which we could not possibly do with our very limited resources. She was very careful, however, to build a limited number of very good tanks of a medium weight and size. There were a proportion of these in each armoured division. These tanks were most carefully tried out and tested. Every preparation was made to turn to this design in mass production as soon as the war started

or became inevitable, and when foreign exchange would cease to be of any importance. These were the tanks which Germany would then build in great numbers for the equipment of her armoured divisions. Germany set great store by these divisions. The personnel were the pick of the German Empire. Nothing which they could need was denied to them.

The Germans never constructed any type of heavy infantry tank before the war. The whole policy was based on the blitzkrieg, which was to evade any form of close, heavy fighting or defensive positions. Every possible effort was expended in this direction.

The Result in the Second World War

It would be quite out of place in this book to give any account of the Second World War, but it may be of interest to recount very briefly how all these ideas for reviving the art of war planned out.

It must first be explained that the Ministry of Supply was formed a few months before the outbreak of the War. A great new Ministry of this nature was bound to take some time to find its feet. It was probably a mistake to form it at all, but this is all discussed in Chapter 9. As a result there was a good deal of disruption in the work. The War Office had handed over to them two good pilot models of the type of tank that we needed, but, as we have seen, they had been rushed through the development stage. There was not much wrong with Matilda, but both these tanks wanted every effort concentrated on troop trials and rectifying every mechanical weakness that came to light. Difficulties arose, however, as explained in Chapter 9, and the position remained very unsatisfactory for a considerable time. The tank which was eventually evolved from the Christie type was called the Crusader. It had a number of small but important mechanical defects such as the fan drive and the water pump. The clutch was also rather overloaded. If this tank had been produced early in the war with these defects eliminated, which could easily have been done, the Crusader would have been hailed with delight. As it was there were continual breakdowns due to these minor points and the tank was very unreliable and earned a bad name.

As regards armament both the Germans and ourselves started with guns of roughly similar calibre in our tanks. The Germans had their 37 mm. and we had our two-pounder gun. We realised,

of course, that there would be a race of gun versus armour when both nations started full production, and we prepared the six-pounder gun as our next step forward. The Germans went for a 50-mm. gun which fired a $4\frac{1}{2}$ shell. The Germans, of course, were far further ahead than ourselves with their tank production programme due to a much earlier start. They were therefore able to change quite quickly to their 50-mm. gun after the first two years of the war. We pressed, of course, for the introduction of our six-pounder, but the Ministry were in serious difficulties during the early stages and we did not get this larger gun until a year later. Our troops were outgunned during this period and put to a very serious disadvantage.

On the other hand, our Matilda tank had some great successes both during the early days in France and in Africa in 1940. It was the most heavily armoured tank possessed by any nation and could stand up to all the anti-tank guns of the day. There is no doubt that our policy of having these two types of tank was definitely sound and paid us well.

As regards organisation we undoubtedly made a mistake in having too few unarmoured troops for supporting the tanks in the armoured division. The all-armoured idea was wrong, and co-operation of all arms should have been the key-note. This would have come to light at once if only we had possessed enough tanks for proper training before the war. As regards the mechanisation of the Army as a whole we were very successful and made few mistakes.

Looking back it seems clear that we were definitely on the right lines in our attempts to revive the art of war. In our ideas we led the world, and we have seen how closely the Germans followed us and copied our ideas. If only the country had put more trust in us, the course of history would have been very different. When the Germans had equipped their large motorised and armoured forces they naturally forged right ahead of us. They worked out a splendid technique for armoured warfare down to the last detail. All the successes which we hoped that we would achieve by developing this new art of war passed into the hands of the enemy. This is bound to happen if an army is not backed by the Government and the country.

The Germans used this new art of war to overrun Poland and then France. It was carried out at great speed and with few casualties

and we had to return to these islands as our base for future operations. What little we had in armoured forces was lost in France and we had to start again from practically nothing. We still put our faith in armoured and motorised forces, but we had first to catch up with the enemy in skill and technique and then surpass them to win on the battlefield. It became my lot to command and raise the armoured forces. I said that it would take us eighteen months to achieve this and that is about the time it took. The dealings with the Ministry of Supply on the equipment side did not come under myself; my duties were the raising and training of the troops and developing the technique for armoured warfare to defeat the enemy.

The story is told elsewhere, but briefly we raised eight armoured divisions and a large number of tank brigades with infantry tanks in that time. We worked as a team with all the divisional commanders and discussed everything at each stage. Our technique was produced and it was one on which we were all agreed. The organisation of our formations was worked out in the same way and when we had reached agreement we made practically no changes for a considerable time. I went several times to Africa and once to Burma to learn the conditions and keep in touch with the armoured forces on all fronts. In this way we built up an organisation and technique for armoured warfare on which there was general agreement and which we felt would stand the test of time. Some stability of this nature is very essential in building up a new and large activity of this nature.

In the meantime we had to continue fighting in Libya. The armoured forces fought bravely and with a good deal of skill, but there had been no time to train and develop our tactics. We were some way behind the Germans. As we were also outgunned at times, the troops were tried very severely. They won some battles but lost others, and the fighting surged backwards and forwards to Benghazi and back.

Then came the day when our troops had received proper training, our commanders had sorted out and understood the technique of armoured warfare, and we had six-pounder guns in our tanks. This occurred after some eighteen months and coincided with the Battle of Alamein. From that day we had the measure of the Germans and had consistent success. The technique which we had developed proved itself in North Africa and Tunisia and later in Sicily and Italy.

At this stage the thought came about that H.Q. Armoured

Forces was no longer needed and that we had completed our work. I was sent myself to Russia where I was able to study Russian methods of warfare. It was, however, unfortunate that this headquarters was abolished. In addition to raising the armoured forces it had served as a head to co-ordinate and spread our knowledge and methods and to give advice. A large measure of uniformity had resulted which was very valuable. All this was now dissipated. As regards tanks we now had the Cromwell tank coming into production. It was a direct development of the Crusader, but all the weak mechanical features had been eliminated. It had fairly thick armour and a 75-mm. gun. As a cruiser tank for the mobile role it was probably the best tank in the world and was better than the Sherman, though the latter had been our main tank in North Africa and had given us splendid service. As regards infantry tanks, we had replaced the Matilda by the Churchill which had proved to be a very valuable tank. But by the time we were producing the Cromwell tank as a cruiser, we needed a new infantry tank. The Churchill was out of date. Unfortunately an idea was spread that we no longer needed two types of tank. This was totally opposed to the policy which we had always followed and which had proved so successful. There was now no H.Q. Armoured Forces to advise the General Staff in these matters. Nor was there a senior General Officer of the Armoured Corps to visit commanders in the field and discuss these affairs. I never had any difficulty in putting such matters right when I was in that position. The directorate of the Royal Armoured Corps which now existed was not in a position to carry out such work. Their time was completely occupied with equipment problems. Major-General Richardson and Major-General Briggs who replaced him did splendid work in many ways, but they were not in a position to guide the General Staff and to discuss matters of policy with senior commanders which had been my duty at H.Q. Armoured Forces.

As a consequence of all this, less pressure was put on producing a new infantry tank. The Germans, on the other hand, turned all their efforts on to big, heavy infantry tanks and produced their Tigers and Panthers. They realised that the days of blitzkriegs were over for them. They would now be on the defensive and heavy infantry tanks were what they wanted for that. So it came about that although we had started a long way ahead of the Germans in infantry tanks we now fell right behind them.

As a result we saw that in France in 1944 we had great success in the short spells of mobile warfare such as the drive into Belgium. In all that warfare the early training of the troops and the technique of armoured warfare which they had absorbed all held good. Under these conditions of warfare the heavy Panthers and Tigers had no hope of stopping our armoured divisions (with their Cromwell tanks) and our mechanised forces. These heavy tanks were never in the right place at the right time. But between such spells of mobile warfare we were handicapped in the close and heavy fighting because we had nothing which was a match for the Panthers and Tigers in this work.

We had forged right ahead of the enemy in mobile warfare both in our technique and with our Cromwell tanks. If only we had put equal pressure on producing our new model of infantry tank all would have been well, but the thought gained ground, after I had left for Russia, that one type of tank of the Sherman or Cromwell type would serve for all purposes. Hence it was that we were seriously delayed in the close and heavy fighting with the Panther and Tiger tanks on the Caen defences in Normandy, and again when we met close warfare after our rapid advance into Belgium. Our manufacturing resources were so much greater than those of the enemy that if we had pressed on with the manufacture of the next model of infantry tank we would have been able to blow the Tigers and Panthers off the battlefield and break more rapidly through these defences, while still retaining our superiority in the mobile role with the use of our Cromwell and Sherman tanks. This saving in time might well have made a great difference to the course of the war.

Although we were all disappointed when the headquarters of the armoured forces were abolished, we were able to look back on a happy period of two years during which a great team spirit had been built up and maintained. We had also seen the armoured forces rise in a period of eighteen months to a position where we were ahead of the Germans in every respect. It was no fault of ours that we were later surpassed on the infantry tank side by superior German tanks. In addition to these thoughts we had the satisfaction that of the eight armoured divisional commanders who were trained during that time, under H.Q. Armoured Forces, six became corps commanders, and of these three became Army commanders. These were Lieutenant-General Sir Oliver Leese, Sir Miles Dempsey,

and Sir Richard McCreery. I do not know why the Chief of the Imperial General Staff abolished these headquarters that had carried this out in addition to the work of raising these forces and the successful development of their technique.

Military Bridging

Perhaps the progress in military bridging has had as much effect as any other development in the revival of the art of war. Rivers, which presented such formidable obstacles in the past, have been bridged quickly and easily on all the fronts by the use of modern equipment. There is little doubt that we began to lead the world in this direction during the latter part of the First World War and we have maintained our lead ever since. It is therefore of interest to follow this work of development, ending up with the famous Bailey bridge.

At the start of the First World War no armies carried any girder bridge equipment and pontoon bridges were limited to two-ton axle loads. Nothing much more was needed for the horse-drawn equipment of the field armies of those days. During that war, however, mechanical vehicles increased rapidly in importance and later the tanks appeared. Bridging equipment became important and the famous Inglis tubular girder bridge was designed and used with great success. Other types were used as well, such as the Hopkins bridge, but the speed and handiness of the Inglis design was outstanding.

After the First World War we were still leading the way in armoured warfare and it was, therefore, essential for us to be well to the fore in military bridging. The Inglis bridge was then replaced by the Martel box girder bridge. Although the Inglis bridge had been a great success, it was handicapped by the fact that only one type of bridge could be built with this equipment. If the span was short or if the loads to be carried were lighter the bridge might be quite unnecessarily strong. This meant that much superfluous weight had to be transported to the site and handled by the sappers who built the bridge. It was in this direction that the box girder bridge held the advantage. There are two types of girder bridge. The Inglis was a through type in which the girders are placed on each side and the roadway runs through between them. The other type is the deck bridge in which the girders are usually less deep

and the roadway is placed on top of them. The box girder bridge was of the deck type. It consisted essentially of skeleton steel boxes which could be quickly pinned together to form long girders 3 feet deep and 2 feet wide and of whatever length was needed to span the gap. The roadway was placed on top of them. The number of girders which were used depended on the span and load to carry. Two, three or four girders could be used, or more if a wider bridge for two-way traffic was required. The bridge was jokingly referred to as "Meccano" and that is exactly what it was. There were only half a dozen different pieces in the whole bridge. This bridge was our standard equipment for the whole period between the two wars and was very popular.

Then in 1933 a well-known civil engineer, Mr. A. M. Hamilton, patented a new type of girder bridge. The girders had the appearance of a normal design, but the steel members which were mostly bars of angle steel could be made of various strengths by using a single angle or several bolted together. In this way the strength of the whole girder could be made to suit the span and the load to be carried. In addition the design was such that one or two girders could be used side by side and they could also be used one on top of the other so as to double the depth of the girder. This provided a bridge of great adaptability.

The design was accepted by the War Department and considerable numbers were made. Many of them were used during the war, particularly for repair work on main communications by road and rail. There is a great future for this bridge in this type of work. In the meantime Professor Inglis set to work to produce a new version of his tubular bridge. It was a through type and he used the same idea as in the Hamilton bridge of employing one, two or three girders side by side on each side of the bridge and also of using two or even three girders on top of each other to increase the depth for the longer spans. In this way the strength of a single-girder bridge which was suitable for light loads and short spans could be increased about nine times by using three girders side by side and treble depth, making a total of nine girders on each side of the bridge instead of one. There was no longer any necessity to bring up and handle unnecessarily heavy weights to carry traffic over the shorter spans or to take the lighter loads.

At this stage Mr. Bailey stepped in with his plans. He was an eminent civil engineer who had been employed for some time at

the Royal Engineer Experimental establishment which I had started at Christchurch after the First World War. The new form of Inglis tubular bridge had certain limitations. It was not too suitable for mass production. Mr. Bailey now designed his bridge, which combined the advantages of my box girder bridge and also that of the Hamilton and Inglis types. Instead of the skeleton steel boxes of the box girder he used panels which were held together by pins in exactly the same way. He thus retained a suitable design for mass production. But, in addition, he used the other ideas of being able to employ one, two or three girders alongside each other on each side of the bridge and of using one girder on top of the other when greater strength was needed. It is more difficult than might appear to combine the advantages of other people's ideas and incorporate them into one design.

The Bailey Bridge is one of the outstanding features of this war. For floating bridges, the Bailey girders distribute the load over a large number of pontoons to obtain the requisite floatation for the heavier loads. The engineer-in-chief, Major-General C. H. King, was right when he pressed for a great production of Bailey bridges early in this war. Immense numbers have been used in every theatre of war. It is no exaggeration to say that they have doubled the fighting value of our armoured and motorised forces.

Machine Power instead of Muscular Power

We have been discussing in this chapter the revival of the art of war from the point of weapons and technique. There was, however, another aspect of warfare in which we were making great progress. The First World War was won mainly by the use of the muscular power of the horse and the man. As soon as the tank arrived, however, in 1916 we saw at once at H.Q. Tank Corps that wars in the future would be won more by brains and machine power than by muscular power, though the change would come about gradually. We have already discussed the part played in this direction by the fighting tank and cross-country lorries, but there were other ways in which we were pushing ahead in the use of machine power before the end of the First World War. Some of us who were enthusiastic about these matters developed a special engineer tank. It was called the R.E. tank and it could accomplish the following tasks:—

- (a) Carry a bridge and lay it across a 20-foot gap to take 40-ton loads. The bridge was controlled hydraulically and could be laid under fire in less than one minute and would carry our heaviest tanks.
- (b) Push an Inglis bridge which was mounted on idle tracks and launch it across a 60-foot gap in a few minutes. The work could be done under fire and the bridge carried our heaviest tanks.
- (c) Push a pair of 2-ton steel rollers in front of the tank and thus sweep a way through a minefield.
- (d) Tow a Fowler plough to take the first cut and thus save labour in trench digging. A "mole drainer" attachment could also be used which buried a bunch of signal cables 2 feet deep at 4 miles an hour.
- (e) Advance with demolition charges fastened on a bowsprit in front of the tank and blow down enemy obstacles.

The trials were just being completed when the war ended so the R.E. tank was never used.

A few years later a Field Company of the Royal Engineers was selected (the 17th Company) and was used to test all these ideas on manoeuvres and to suggest how we could make further use of "power tools." By that time a lighter type of tank was in use and so lighter types of bridge-laying devices were employed. Good progress was made in all these ways of using the mechanical power of the tank to carry out these tasks under the protection of its armour plate. A little later many types of power tool were introduced such as drills and saws to save manual labour in the field and the motive power was compressed air from a mobile compressor plant. Later still bulldozers were employed to save labour in earth work and some of these were armoured so that they could be used in the forefront of the battle. This use of machinery and power tools revolutionised the speed and manner in which it was possible to carry out this engineering work for the Army on the battlefield.

We fell behindhand, unfortunately, with our work on the R.E. tank. When the Second World War broke out, however, this work was revived and we made good progress. The Churchill model was taken as the R.E. tank and devices added to enable it to lay short and medium span bridges in much the same ways as we had developed at the end of the First World War. Our original ideas for

advancing into battle with charges for demolition purposes were also revived. Some of the tanks could also throw large charges from a spigot mortar. Special R.E. units were formed to man these tanks and they carried out their work with marked success against the obstacles and defences in the landings on the Normandy beaches. Youth with its usual enthusiasm had carried out all these trials at the end of the last war; it is fortunate that this had happened for the ideas were easily adapted to modern tanks and did much to overcome the defensive strength of the Atlantic Wall.

The progress on the field engineering side was very remarkable. New roads were prepared with bulldozers at great speed and concreted or tarred by machines. This work was often carried out close behind the front. In the past such work had always been done by manual labour with hand tools. Landing grounds for aircraft were also prepared by the use of machines and special plant to save time and manual labour.

Here we close this chapter on the revival of the art of war, but a brief summing up may not be out of place. Firstly, we saw the great efforts which we made after the First World War to resuscitate the art of war by using mechanised and armoured warfare, and how we led the world in these ideas. Secondly, we saw the Germans copying our ideas and then forging right ahead because we did not possess the financial means to raise the troops and tanks and to train them as a mechanised striking force. Thirdly, we saw the Germans prove the value of our ideas by winning great campaigns against Poland and France. Fourthly, we saw how we had to build up our forces and regain our lead and how we succeeded in achieving this result though we lost ground badly in one direction when we abolished the H.Q. Armoured Forces. During all this period we were making every effort to introduce all forms of machinery to save time and man-power and thus increase the efficiency of the Army and revive the art of war.

Let us hope that the younger generation in the Army will continue to fight and strive in peace time to carry on this work. It may shorten the career of those that do so, but one has the satisfaction of knowing that one has done the right thing. So long as I live I will continue to help this party with their progress, and there are good signs that the younger commanders that are now rising to power in the Army will give a warmer welcome to their proposals and ideas.

Can we not draw a parallel between all this work and what happens in civil life? Many officers who have seen these things happening will return to civil life after the war. We all know that our main problems will be the revival of our industries and export trade. Are we going to leave all this to the older men or shall we take the views of the younger generation? We shall have to take great financial risks in order to renovate our industries. Perhaps this will be best done by the older heads seeking the views of the younger generation as some of us have done in the Army.

The Provision and Maintenance of Munitions of War

THE Navy were "mechanised" over a century ago. The Army was only mecahnised quite recently, and the Air Force started life in that form. By reading history one finds that all the difficulties which occurred when the Army departed from the horse-drawn days occurred in much the same form when the Navy changed from sails to engines. For instance, we find an instance of the engineer visiting a sailing ship to arrange for the installation of an engine and being told to put his "horrible contraption somewhere quite out of the way." The captain's first thoughts were for the disposition of his guns, and he was not in favour of introducing an engine if it interfered with the proper lay-out of his armament. Besides the engine might break down! It was a good many years before the Navy would happily accept these new introductions and before they had learnt all about them and were, in fact, mechanised.

When it came to our turn in the Army it was easier for us because mechanisation had spread throughout the country. Even then we made plenty of mistakes, and it was a long time before we had our house in order. We are not really right yet. It is therefore proposed to discuss in this chapter some of the main factors about mechanisation. We will see how we stand at present and how we should steer things to improve our position in this vitally important subject in the future.

The State of Knowledge on this Subject

Let us start by seeing if the Army knows how to demand what it wants from those responsible for producing munitions. At first

sight this seems a very simple matter. Any regimental officer will say, "Of course I know what I want if only those stupid people will manufacture it." It is, however, a far more difficult matter than that. Take a tank, for instance; it is no use asking for increased speed without saying at the same time what you are prepared to sacrifice to obtain that speed. It must be either armour or armament or you may have to accept a much larger and more expensive tank. The preparation of specifications by the General Staff to tell the designers exactly what they require is a very difficult task. Then the question of modifications to design arises. It is so easy to say, "Just make these few alterations and this particular munition would be perfect." Sometimes that can be done, but at other times the greatest difficulties will arise if these changes are demanded. Those engaged on the munition supply in the First World War will remember only too well all the delays that were caused due to the lack of knowledge by the General Staff on these important matters. After that war we were determined to put this right. I published many articles on the subject in military journals. Some of them were a bit critical and unpopular, but in the end a course of instruction on this subject was introduced at the Staff Colleges which did much good. I must have given about forty lectures myself on this subject at one or other of these colleges during the period between the two world wars.

The other equally important aspect was that the mechanical side of their vehicles and weapons should be thoroughly understood by all regimental officers and men. This started very slowly but reached a high level, and there is now little to criticise in that direction.

The Provision of Munitions

Let us now turn to the subject of the provision of munitions. It has long been recognised that a good supply of the right type of munitions is at least 50 per cent towards winning a war. In the First World War we had a very poor supply for the first two years and it was not till the third year that it could be called satisfactory. In the fourth year we had all we wanted. The delay in that war was due to a variety of reasons, but not least of those was the fact that the General Staff of those days had no knowledge at all on the subject of the design and production of munitions. We have already

seen how we set about to rectify this matter after that war. Exercises discussions, lectures and visits to manufacturers were arranged for the Staff Colleges so that the future General Staff would not again be found so deficient of any knowledge of this subject. This instruction undoubtedly sank home and there was no failure in this manner by the General Staff in this war. Under their direction the Ministry of Supply undoubtedly did much good work and yet it is fair to say that there was an even longer delay in this war than the last before we had a good supply of the right type of munitions in many instances. We must therefore examine this problem, for it is one of vital importance. There is a strong feeling that we must never again have a failure of this nature in any future war.

In peace time the department that deals with the design and production of munitions of war is that of the Master-General of Ordnance. We will employ the usual abbreviation of M.G.O. for this department.

The design work and what little production that took place between the two wars was, of course, desperately handicapped by financial stringency. During the last two or three years before this war, however, the financial position became easier. During this period the War Office built up an excellent organisation under the M.G.O. and had its own supply department. No one can say that the work did not progress well during this limited period that was available. Our twenty-five-pounder field gun and our anti-tank gun could hold their own with any foreign competitors. Our six pounder anti-tank gun which was designed and projected before this war, as next step, proved to be an excellent weapon when it was produced. In tanks our Matilda was the most heavily armoured machine possessed by any army and dominated the battlefield in the small but typical tank action which took place at Arras in 1940. Our cruiser tanks were the prototype of the successful Cromwell tank though the early models possessed many unreliable mechanical details. It is fair to claim that the War Office handed over a sound situation in the design of munitions to the Ministry of Supply which was formed just before the war.

It naturally took some time for the Ministry of Supply to find its feet. A number of the military officers from the M.G.O. department went over to the new Ministry at once, but the mixing of military officers and civilians in one Ministry is not easy and difficulties arose. On the weapons side the retention of the military

officers was essential. The Director of Artillery came over with his staff from the M.G.O. department at the War Office and this side of the work of the Ministry of Supply went well. On the tank side there was pressure to put civilian engineers in charge. However able they may have been they were naturally out of touch with military requirements. The General Staff at the War Office must be able to discuss matters with engineers who have an understanding of the military side. The civilians at the Ministry who were handling this work could not possibly have this knowledge. Hence serious difficulties arose. As a result we had tanks coming out of production for the first two years of the war without any great attempt being made to eliminate mechanical weaknesses or other features that were a very serious handicap from a military point of view.

In many other ways the Ministry of Supply did splendid work. It is a great problem to swing over the industry of this country from peace-time products to munitions, even though a good deal of thought had been given to this in the short preparatory period that was granted to us before the war. The fact remains, however, that there was no proper head or control of this vital work from a military point of view. On the one side we had the General Staff who knew what they wanted and understood sufficient about the subject to make reasonable demands. On the other side we had the civilian engineers ready to plan and control production. Between them the necessary link was missing. This had been supplied in the pre-war days by the M.G.O. department at the War Office. The General Staff was not in a position, nor was it their duty, to prepare detailed specifications for weapons or machines of war. This has to be done in co-operation with trained engineers who also possess the necessary military knowledge. It was this that was missing except for a few departments in the Ministry of Supply. Efforts were made to improve the situation by putting in an officer with wide business experience into the General Staff at the War Office to deal with the civilian engineers at the Ministry, but this did not, of course, eliminate this radical fault. The troubles were perhaps particularly marked on the tank side, but these continued, with little improvement. It took four and a half years of war to produce a good and reliable cruiser tank in the Cromwell, though the components of this tank were all founded on pre-war designs. It was an excellent tank when it arrived and swept all before it in open

warfare in France, but in the meantime we had fallen behind in infantry tanks. The Germans had changed their policy and concentrated on Tigers and Panthers which were infantry tanks. In close fighting in which these tanks are used we had nothing in Normandy to pit against them, as the Churchill tank was outclassed. It is inconceivable that these affairs would have happened if somebody such as the pre-war M.G.O. department had remained in existence to control all such matters. The reply may be made that the troops were pleased with their munitions supply generally during the fourth and fifth years of the war and they said so. This is perfectly true, but for that matter they were equally pleased during the third and fourth years of the First World War. Our aim should be to please them at a much earlier stage than this.

Our Future Organisation

It seems quite clear that the policy which we have followed in the past of having one organisation in peace and changing to an entirely different one in war is basically unsound. The delay in obtaining a good flow of the right type of munitions has been partly due to the disruption caused by this change on the outbreak of war and the time that it has taken the new Ministry to find its feet. Should we therefore aim at retaining a Ministry of Supply in peace time? It would be a small and extravagant Ministry to retain for the Army alone. Should we therefore try and build up an inter-service Ministry for this purpose? If this included the design side it would be very difficult to combine the complicated and detailed requirements of each of the three services in one Ministry. Moreover, it would be much too big an organisation in war. There is no saving and only inefficiency follows from having an unduly big organisation.

After consulting several officers who have had wide experience in this direction it seems that there is much to be said for having a comparatively small Ministry of Production for all three services and charging each fighting service with the whole task, in both peace and war, of design and production of their own requirements except that production capacity would be allotted to them in accordance with their requirements and the right degree of priority by this Ministry.

Each service would then deal entirely with all questions of design, experiment, specification, standardisation, inspection and planning for production for their own requirements within the capacity allotted to them by the Ministry of Production.

The latter would deal with all questions of priorities and allotting capacity for production as well as raw materials.

It would be for decision whether common user commercial type articles would be best dealt with by each service or by this Ministry. As regards munitions common to each service, such as rifles, it would probably be best if one service was detailed to deal with this for all three services.

It would, of course, be very desirable to retain the Ministry of Production in some cadre form in peace time ready to undertake these important duties at short notice in war.

If some scheme on these lines is adopted we can now consider very briefly the organisation that we would need at the War Office for the Army side of this work. Generally speaking, it would mean a revival of the pre-war M.G.O. organisation without any very great changes. This body would provide the guidance to the General Staff and the control for the design and supply of all munitions for the Army in peace and war. This organisation did very good work before the outbreak of war. It was staffed by soldier mechanical engineers. The portions of the present Ministry of Supply that continued to be controlled by these officers carried out by far the best work in the Ministry. The future control of this vital subject should remain in their hands. The soldier mechanical engineer has earned and won this position. Naturally the expansion for war will necessitate the employment of large numbers of civilian mechanical engineers to help them and particularly on the research side, but the control must remain in their hands. Of course all the great production problems within the civil firms must be solved by their own civilian engineers and the closest touch will have to be maintained—as it always was in the past—between the M.G.O. department and the civil firms. It is my experience, which extends for over thirty years, that the civil firms prefer to deal with the soldier mechanical engineer in these matters than with other civilians that have no real grasp of the Army side. If only we have the courage to launch out on these lines I feel confident that we will never again see the failures that occurred over these vital matters in the first half of both the world wars.

Mechanical Maintenance

We have already mentioned that both the regimental officers and men now possess good mechanical knowledge about their weapons and vehicles. We must now see how they are maintained in good condition and repaired when necessary. This problem may be said to have arisen for the first time when the tank units appeared in France in 1916. The first solution to the problem was to have a small mobile workshop with each unit. This contained a number of skilled mechanics who tried to do the whole of the work of keeping the tanks mechanically fit. The crews of the tank who were not of course tradesmen took no part in this work. In fact the skilled mechanics objected to the crews helping because they usually made mistakes and gave them more work. Hence we had a little band of heroes in the small workshop who tried to do all the work on some fifty tanks. In spite of their most strenuous efforts they fell a long way behind in their work. At that time we had with us, as our senior engineer officer in France, Lieutenant-Colonel F. Searle. He brought with him wide experience from civil life and his solution to the problem was as follows: reduce the workshop to a small detachment of a few skilled men and then all the work will *have* to be done by the tank crews and the skilled men will act simply as instructors. It was a bold move to take in the middle of a war, but our commander, General Sir Hugh Elles, did so and this has now become our accepted system throughout the Army.

With each large mechanised unit there is a light aid detachment of a junior officer and a few skilled men. The officer advises the commander about the mechanical state of his vehicles and weapons and he and his men help the unit to keep them in a fit mechanical state. This help takes the form of advice, demonstration or instruction, but the actual work is carried out by the men of the unit. If a repair is needed which cannot be carried out on the spot with hand tools or by the simple replacement of a spare part, then the weapon or vehicle is sent back to second line workshops which are usually situated a few miles in rear. Thus the entire responsibility for the mechanical efficiency of a unit is thrown on the commanding officer and he is only relieved of this when his vehicles or weapons are sent back to workshops. Of course there are many more matters to discuss, such as the systems for salvaging damaged

vehicles in battle and the replacement of vehicles from in rear, but there is no space to discuss these matters here. This general system for maintenance and repair is now thoroughly understood and has worked particularly well.

The officers and men who carry out this repair work and advise the unit belong to the Royal Corps of Electrical and Mechanical Engineers. This Corps was not formed until the middle of the war. The way which led to the introduction of this Corps is rather interesting. When gunpowder was invented and guns came to be used in large numbers the Ordnance Corps came into being. They made the guns at Woolwich Arsenal and looked after them in the field and were, in fact, the technical corps of the Army in that line. Then a little later the Royal Regiment of Artillery came into being and they gradually took over all this technical work. The Ordnance Corps then took over all the Stores side and repair work. The Corps became non-technical and they had engineers attached to them. This was the position during the First World War. Quite obviously we could not go on like this. As mechanisation was coming in very fast it was clear that we would need a Corps of Mechanical Engineers to take over all this work. At that time the mechanical engineers in the Army came under the Ordnance, who were really the store-keeping side of the Army. This was absurd. Many of us felt strongly about this and wrote articles about it. There were innumerable committees to discuss this matter. Those of us who had raised this question were quite clear as to what was required. We wanted a corps which would carry out all electrical and mechanical engineering in the Army. The Royal Engineers are mainly "civil" engineers, though they carry out some electrical and mechanical work as well. Our proposal was that a separate branch of the Corps of Royal Engineers should take over this work but that they would be still Royal Engineers with their emblems and traditions. The senior officers of the Royal Engineers at the time refused to take this on. This was a great pity from every point of view. We therefore pressed that a new corps should be formed for electrical and mechanical work in the Army. We were quite definite that this corps should take over the supply of all materials and spare parts for the repair work as well as the work itself.

This would have left the Ordnance Corps with the supply of all the needs of the Army in clothing and equipment and all repair work in textiles and leather. This represents a considerable task in

an army but was, of course, a much smaller responsibility than they had previously possessed.

Nothing resulted from the work of any of the committees in the period between the two world wars. I personally gave the above recommendation to each of these committees. In the end it was suddenly decided to move in this direction during the war. It was a bold and wise move even if it came rather late. The new corps known as the "Reme" (R.E.M.E.) was formed and quickly found its feet. They decided, however, to leave the vital matter of the supply of spare parts in the Ordnance so as not to take too much away from them. This was a sad mistake.

I think the authorities were right to form the new Corps as they did, with a new name and cap badge, but it will, of course, be essential to give them the complete control of their spare parts. This will take away a great deal of work from the Ordnance Corps and leave them with comparatively little. This is unfortunate as the Corps has great traditions. My own solution would be to rename the R.E.M.E. as Royal Ordnance Corps after the war and give them their proper control over their own stores. Then I should pass the remaining duties of the Ordnance Corps to the Royal Army Service Corps. I believe this would be a very popular and happy solution.

Soldier Mechanical Engineers

While we were discussing our proposed future organisation for the provision of munitions of war, we referred to officer or soldier mechanical engineers. This term is meant to indicate an officer who has gained considerable experience about the way in which the Army fights and who also possesses mechanical engineering knowledge. We saw that this type of officer was an essential link between the General Staff and the manufacturers. Our new proposed M.G.O. organisation will need to be staffed by officers of this nature, supplemented with civilian mechanical engineers or scientists for some work such as research. Now there are two ways of obtaining the soldier mechanical engineer. You can either take a regimental officer and teach him engineering or you can take an engineer and teach him soldiering. The R.E.M.E. Corps will be basically engineers, but they will learn a great deal about the Army. The junior officer with a light aid detachment lives with his unit and sees and

learns almost everything about it. The best of these young officers would make first-class "soldier mechanical engineers."

Then there are always a number of regimental officers who are very interested in the engineering side. The custom has been to put them through certain courses and they can then join this class. The general idea has been that it is this type that you require as a whole for staffing the M.G.O. department. A certain number of officers who have graduated in this way have been most successful. The only objection to this method is that there is no "pool" from which to pick. If you select ten regimental officers who know all about the Army side and train them on the engineering side you will be lucky to get more than two or three out of the ten who will prove themselves to be first-class staff officers in the M.G.O. department or for use in the design or inspection departments.

On the other hand, you have a large pool from which to draw among the officers in the R.E.M.E. Corps and they will be sure to produce some first-class officers for this work. It therefore seems likely that we shall use a proportion of regimental officers who have been engineer trained for some of this work. Such work as the design side on the fighting body of tanks would be particularly suitable for this class of officer. But for the greater part of the work of the M.G.O. department and the design and inspection branches, etc., it is probable that the R.E.M.E. Corps will eventually provide most of the officers. Some of this staff will no doubt also be found by the Royal Engineers and the Royal Army Service Corps.

The Problem of India

ARE WE HEADING ON THE RIGHT ROAD?

WE are a very lucky Empire. We have often made mistakes and then those mistakes have turned out to be for our benefit in the end, though no one could have foreseen that this would happen. I think an impartial critic would say that we have been animated mainly by altruism when we made some of these mistakes. If so, we have had our just reward. In addition to this we have some intangible trick of "getting there" though we often seem to be heading in the wrong direction.

This characteristic of heading on the right road, though it appeared at the time that another road would pay us far better, has been of great value to the Empire. We are now, however, faced with a great problem in India. We have moved fast along a road leading to far-reaching reform in that country. The provinces now have almost complete self-government. The control at the centre is mainly in the hands of Indians, though we still retain paramount power. The country has now been demanding the final step of complete Dominion status.

We have agreed to this, subject to one indispensable condition. We have insisted that there shall be agreement between the main elements in India's national life as to the constitution under which that freedom is to be exercised before India can gain this last final step. As we discuss these matters we shall see that it is highly unlikely that any agreement of this nature will be reached for a very long time, which would satisfy impartial critics on this subject. There may, however, be partial agreements between some of these elements. Should we press forward and grant India full Dominion status in that event, or should we insist on a proper and more complete agreement before we take this great and final step? Will

it be to the advantage of India to hasten this act and to take great risks of internal dissension in order to hasten the day when India can say that she is on an equal footing with the rest of the Empire in Dominion status? Or is there any other line which we can suggest that might be taken to give India a form of self-government, without running these very serious risks of civil war?

Let us consider the whole position very broadly before we descend to a more detailed discussion. Everyone knows that we have always made it clear that we were only governing India until her own people were fitted and ready to assume their own control. But in giving these assurances we made it equally clear that they would not gain control until they were unquestionably capable of doing so. The main point in which they now fail as regards capability is in their inability to agree among themselves.

Now events in the East move slowly. Ninety-nine per cent of the population of India live exactly in the same way as they did thousands of years ago. Their customs and ways and habits have not changed by one iota. And yet in the brief period that has passed since the conclusion of the First World War we have established in India great changes on a large scale and at a far greater speed than anything which anyone intended or had in mind, when the assurances were originally given to India.

By means of wide-spread education, Indians have been enabled to fill the great majority of posts that were held by British people. Indians very largely control both the trade and the government of the country, but before answering the questions as to whether we were right in pursuing this policy at this speed, we must pause and consider to what extent this has benefited the nation as a whole and whether it was achieved with the consent or against the wish of the majority of the people. To do this we must hark back and consider the process of evolution that has taken place during recent years. In doing so there is no suggestion that this process has necessarily been wrong or undesirable, but it is essential to investigate the facts. If we have made mistakes in recent years it is well that they should be acknowledged by all concerned, lest we repeat them in the years ahead of us.

In the early days almost all the officials in India were British; they did their work well. They were not tied to their offices by unnecessary paper work; nor were they worried judicially by the hosts of lawyers and solicitors that exist to-day. The system was

ideal; the Indian had the benefit of a far better form of government than he had ever known. He was grateful for it and he prospered. The poor were relieved from the pressure of their extortionists and the British came to be widely known as the "Garib Parwar"—the protectors of the poor. Unfortunately this ideal state of affairs was not to last.

We started educating large numbers of Indians—far more than we could possibly employ in work which needed this education. As Sir John Anderson once remarked in Bengal, this type of educated man for whom no office work can be found has been rendered unemployable in any type of work which is likely to be available. The problem was also complicated by the phenomenal rise in the population under our beneficent rule. Before our arrival, plagues, famines and wars occurred every quarter or half century on a large scale and reduced the surplus population to normal levels. Indians multiply without any thought for the future and when we removed the above causes of destruction we were bound to be faced with a huge surplus population. Even then we managed to cope with the difficulties. The greatest irrigation schemes that the world has ever seen brought immense tracts of country under cultivation, and land was found for hundreds of thousands of people. But the educated youth naturally demanded office work. We should not have educated so many or so fast, but having done so we found ourselves unable to find any suitable work for them. Many of them became agitators and their cry was taken up in some political circles at home, because the true facts of the case were unknown in these circles in England.

This disloyal feeling among some of the more educated classes of Indians was increased by a great deal of unnecessary discourtesy that was shown to them, particularly during and after the First World War. These newly educated Indians were trying at times, but there was no excuse for the rudeness with which some of them were treated. This may have been partially accounted for by the fact that large numbers of Englishmen from very varied classes and stations in life received commissions during that war, and many of these found their way to India. This type of insulting behaviour to Indians should have been stamped out rigorously.

These disloyal elements grew stronger after the war. They captured Congress, which had originally been a harmless and perfectly fair political organisation. The demonstrations in the big

cities reached alarming proportions. People at home who were ignorant of the true state of affairs, became alarmed and considered that we should give India a large measure of self-government straight away. Democratically minded people at home were most zealous in their cry of India for the Indians without any thought of what this meant and without realising that this was the last thing that the vast majority in India wanted.

During all this period between the First and Second World Wars, India received much publicity. The Simon Commission was held and the report was widely read. The main facts about India became known. For instance, it is now unnecessary to preface a discussion about India by stating that it is not one country but a collection of countries who speak many different tongues. Nor is it necessary to remind people that of the population of about 350 millions some 75 per cent are peasants, and on the religious side about three-quarters of the population are Hindus and the remainder mainly Mohammedans. All these things are well-known facts, but there are other facts, though they cannot be proved by statistics, which are never mentioned in these reports and are quite unknown to the British public. Some of them were possibly unknown at times to such highly placed individuals as a Secretary of State for India. Some of them are unknown or have been forgotten by some of our office-bound officials in India. And yet these unknown or forgotten facts are probably more important than the well-known ones that are proved by statistics. They consist of three main facts.

Three Main Facts

First comes the question as to whether it is really the desire of the majority of Indians to be ruled by Indians. We have already referred to the policy we adopted of educating large numbers of Indians, and as many as possible of these educated gentlemen must obviously be used for government work. We cannot set the clock back in that direction even if we wished to do so. There is, however, no reason why we should not discuss the question as to whether the majority of the Indian people were in favour of this move. It also seriously affects the present-day question of paramount power. The answer to this question of rule by Indian officials was assumed to be obvious in Liberal and Socialist circles in this country. They could not conceive that the people could wish otherwise. Yet if you talk

to a party of Zamindars (farmers) and ask them whether they prefer to be under a British or an Indian district officer they will usually reply that they prefer being under a British official. Ask any company of soldiers whether they would prefer a British or an Indian officer as a company commander and they will usually reply that they want to serve under the British Raj. These replies are not made to curry favour. A foreigner seeking for information would get the same reply. It is not suggested for a moment that there are not plenty of excellent Indian officials and officers. I have known many Indian officers who were just as efficient and popular with all ranks as any English officer. The point that is being made is that the Indian soldiers were quite happy serving under British officers. Generally speaking the country was quite contented under British rule. There were, of course, occasions when there were risings in towns, which made it appear that the people were discontented with British rule. They were usually instigated by Congress campaigns which spread all the usual tales that no taxes would have to be paid under an all-Indian administration, etc. It should, however, be realised that although the working man desired British rule, it was not so with the minor officials. They naturally looked for promotion, and if a place was filled by an Indian their chances of promotion to that post were much better than if the place was reserved for a British official. Hence it was that the desire of the working classes to remain under British rule became obscured. People coming out from England were far more likely to hear the views of the minor official than of the working man.

Moreover, one is prone to judge by what one sees and hears in the towns rather than in scattered country villages. In most towns one found agitators and Congress committees. These were the small minority disloyal elements in India. At times the people in the towns gave them some support, but more usually they had to agitate to live.

Now that such a large measure of self-government by Indians has been established, the activities of the Congress committees in the towns have largely died down, but it is well to remember the course that their actions normally followed.

A Congress committee would fix a rate of subscription to their funds from each shop. Some shops would pay this fine as the line of least resistance though they had no sympathy with the Congress committee. Others refused to pay. When the refusals became

numerous the Congress committee would arrange a "demonstration." They hired about five hundred coolies for an anna (one penny) or two per head. The procession started, headed by Congress flags and banners. The moment an Indian sees a procession he feels he must join in and see the fun and the procession becomes dangerously large and quite unmanageable. The paid coolies, or at any rate the worst characters among them, were kept together by a Congress committee man. Presently they would pass a shop that had not paid its subscription. It was at once raided. The Congressman kept in the background, but the hooligans looted the shop. And so the procession proceeded. Presently the police would come to the rescue of the shopkeepers; a few heads were broken. Immediately large numbers of coolies prostrated themselves. Photographs were taken of stacks of "corpses" murdered by the brutal police, driven to this end by the satanic government. All this made good propaganda for Congress. It also persuaded reluctant shopkeepers to pay their subscriptions, because Indian merchants are for the most part almost entirely lacking in courage and determination. These demonstrations provided another reason why so many people imagined that there was a widespread desire among Indians to rule themselves and run their own affairs.

One of the main reasons why the working classes in India have preferred British to Indian rule has undoubtedly been due to a desire to escape from the bribery and corruption among minor Indian officials. This will no doubt improve in time, but the fact remains that the working man in India has always realised that he had a fair deal from the British official and he has very much appreciated this fact.

We have already agreed that this process of handing over control to educated Indians in the provinces must inevitably continue, and it is up to us to assist them in every way. It is, however, well to remind our Liberal and Socialist friends in this country that by forcing the pace in this direction they have imposed on the working population a form of control which they in no way desired. It is no use pretending that the power of the vote which will remain in the hands of the people, will enable them to control their rulers; whoever is in power will make full use of his opportunities for which the working classes will have to pay.

There have, of course, been certain waves of patriotic feeling in India in some towns. These have been largely stimulated by the

methods mentioned above. There are in some cases very strong family ties in the smaller villages and these ties will often bring out the best characteristics among Indians, but there is no sign of any widespread or deep-seated patriotic feeling for India as a whole, and it is doubtful if any feeling of this nature will ever arise. It is certain that there will be no real feeling of patriotism for India among the people during the next hundred years.

The second fact to which we must now draw attention is by no means an unknown fact at home like the first, but the great depth to which it reaches must be quite unknown in Great Britain. This refers to the communal question. To take the case of Hindus and Mohammedans alone, there is probably not a single man in India belonging to one religion who would give a fair ruling in a communal question affecting both, and even if there is one such man in India no one on either side would trust him. An Englishman who had been a very successful head of police in a very large town in India for a number of years and had dealt with many communal riots was once approached with the proposal that some of the leading citizens—both Hindu and Mohammedan—should be enlisted as special constables. Though very short of police at the time, he refused to entertain the idea because he was quite sure it would lead to further trouble. He refused to believe that any of these citizens would be unbiased in dealing with communal troubles, and there is little doubt that he was right.

It is difficult to see how this deep-seated distrust between Hindus and Mohammedans will ever be eradicated. It is thousands of years old and no great advance is likely to be made in the next hundred years. Although both religions exist in the majority of villages in India, there is no inter-marriage between them. There are conversions from one religion to the other, both forcible and otherwise, but adherents of the two religions remain apart. The attempts to solve the communal problem amongst themselves are ludicrous. The depth of the feeling is quite unknown in this country. On one occasion during some political discussions it was stated that they had nearly succeeded, and were going to make one further attempt among themselves, which would no doubt be successful, to solve the Communal problem. On the day on which I read this announcement in the papers a curious thing happened in my household in India. One of my *syces* (groom) fell off a horse and broke his ankle. I took him at once in a car to the hospital where there was an

excellent Hindu sub-assistant surgeon. The *syce* was a Mohammedan. I impressed on the Hindu that everything possible was to be done for the well-being of the *syce*. The *syce* heard me saying this and knew that my rank would carry sufficient weight to ensure his getting good treatment (although in this case the man would have received good treatment in any case). The surgeon set his leg in plaster of Paris. After a few days I went to see the *syce* and he said he would far prefer to be in his own godown than among Hindus in the hospital. The surgeon said that no harm would be done if he was moved, provided that the plaster of Paris was not touched for ten days. I took him back in my car and left him with his family. Two days later I saw him hobbling along and it was obvious that the plaster had been removed. I asked him for an explanation, and this is what it was. His friends arrived and said, "Who put that plaster on your leg?" and the reply, of course, was that a Hindu had done so. "You know, of course, why he has done that," said his friends, "the Hindu sub-assistant surgeon has done that so that you may be lame for life." After much consultation the Mohammedan butcher was sent for. He arrived with certain fats. The plaster was removed with a hammer and the fats were rubbed on.

The moment that I heard what had happened I rushed him back to hospital and the surgeon was luckily able to apply fresh plaster before the bones had parted. Eventually the bone healed and the *syce* was quite strong again, but he was nearly lamed for life by this childish performance. At first this may sound as just a foolish story, but it represents very exactly the normal feeling between Hindus and Mohammedans all over India. Although the *syce* had heard me talk to the Hindu and knew that the latter would not have dared play me false even if he wished to do so, yet he could not bring himself to trust a Hindu surgeon or believe that the Hindu would really do the best thing to cure him of his troubles. When this feeling exists all over India, is it surprising that the leaders of the two sides should totally fail to arrive at any settlement of the Communal question?

One has heard a good deal at various times of those meetings which have been held at large centres to promote good feeling between these two great communities, and also with the Sikhs. These conferences have been largely organised by Congress supporters. A party of Mohammedans have at times supported these

meetings, and there has been a display of pretence at arriving at unity of feeling for the benefit of India as a whole. At first sight this appears to be a movement on the right lines which should have our earnest support. Unfortunately it is all a political move to boost up Congress. The latter still have or had large funds at their disposal. Certain Mohammedans have been heavily bribed to play up at these conferences, but it is, of course, impossible to keep anything secret in India; the truth leaked out, and these Mohammedans have no following. It was merely an attempt to try to raise the prestige of Congress and pretend that their political supporters were fit to govern India and would deal fairly and amicably with all religions. Such a state of affairs is not in sight and probably never will be.

This then is the second great fact which is not fully appreciated in Great Britain—that the day is not in sight when there will be any sort of accord between Hindus and Mohammedans, to say nothing of Sikhs and other denominations.

No one other than the British soldier or official is trusted by either side. This has been proved over and over again during communal disturbances. The more we remove the control of the British official, the greater will grow the tension between the two sides, and this may lead to disastrous results. To say that India is fit for Dominion status at the present stage is childish.

The third fact is one that is little understood or realised in England, where the general belief is that the present inhabitants of India have been there since the earliest days and that it has always been their country. Actually there have been some sixteen invasions of India since the birth of Christ; some of these invasions only reached as far as the Indus, but others penetrated much further south, and all of them left their mark on the country. Many of these Aryan invaders remained in the country and intermarried with the people. Thus the Aryan stock was weakened by the southern blood and conquerors grew weaker till they in turn were conquered by fresh invaders. Thus we find in the north of India, and particularly in the Punjab, a people who spring largely from Aryan stock; they are mostly Mohammedans and produce a fine martial class though rather backward in education.

Further south we find a weak mixture of Aryan stock and an enfeebled race possessing neither the martial qualities of the invaders nor the natural powers of withstanding the great heat

which is possessed by the aboriginals who are found in the south of India. Yet this middle section have all the brains and it is they who provide the agitators who sow discontent. They claim that it is their right to rule the country, but we might well point out that as they are only the survivors of past invasions it is no more their country than ours. Furthermore, they know full well that it was only our arrival in that country that stopped further invasions, and if these had taken place they would have been overrun and given no opportunity to express any grievance at all.

These considerations raise a point of great importance. The original inhabitants of India who live in the south have never been sufficiently numerous or developed to govern the country. Hence India has always been ruled by invaders. The climate of the country is such, however, that if the conquerors remained in the country for two or three generations they degenerated and became unfit to rule and fresh invaders took their place. Under the British there has naturally been a constant stream of virile men coming from Great Britain to maintain our rule in India. Now that we are handing over so much control to a people who live in the country and who are not yet really acclimatised, shall we see a repetition of past failures?

It is possible that under modern conditions, with easy access to the hills in summer, the Indian may become gradually acclimatised and prove capable of maintaining rule, even though he lives and breeds in this degenerating climate, but if this proves to be true, it will be the first time in history that it has happened.

Our Loss of Prestige

We have now seen the trend of events between the two world wars and we have discussed these main facts which have been either unknown or not fully realised in this country. There is little doubt that if we had moved a little more carefully during this period it would have been better in many ways for the country and the people of India. This does not in any way indicate a desire to discourage progress among Indians. They have quite rightly been encouraged to take up education so that they might fill many posts which were previously held by British people. The greater majority of Indians were definitely friendly to us during all this period and quite ready to co-operate loyally with us. The disloyal element con-

meetings, and there has been a display of pretence at arriving at unity of feeling for the benefit of India as a whole. At first sight this appears to be a movement on the right lines which should have our earnest support. Unfortunately it is all a political move to boost up Congress. The latter still have or had large funds at their disposal. Certain Mohammedans have been heavily bribed to play up at these conferences, but it is, of course, impossible to keep anything secret in India; the truth leaked out, and these Mohammedans have no following. It was merely an attempt to try to raise the prestige of Congress and pretend that their political supporters were fit to govern India and would deal fairly and amicably with all religions. Such a state of affairs is not in sight and probably never will be.

This then is the second great fact which is not fully appreciated in Great Britain—that the day is not in sight when there will be any sort of accord between Hindus and Mohammedans, to say nothing of Sikhs and other denominations.

No one other than the British soldier or official is trusted by either side. This has been proved over and over again during communal disturbances. The more we remove the control of the British official, the greater will grow the tension between the two sides, and this may lead to disastrous results. To say that India is fit for Dominion status at the present stage is childish.

The third fact is one that is little understood or realised in England, where the general belief is that the present inhabitants of India have been there since the earliest days and that it has always been their country. Actually there have been some sixteen invasions of India since the birth of Christ; some of these invasions only reached as far as the Indus, but others penetrated much further south, and all of them left their mark on the country. Many of these Aryan invaders remained in the country and intermarried with the people. Thus the Aryan stock was weakened by the southern blood and conquerors grew weaker till they in turn were conquered by fresh invaders. Thus we find in the north of India, and particularly in the Punjab, a people who spring largely from Aryan stock; they are mostly Mohammedans and produce a fine martial class though rather backward in education.

Further south we find a weak mixture of Aryan stock and an enfeebled race possessing neither the martial qualities of the invaders nor the natural powers of withstanding the great heat

which is possessed by the aboriginals who are found in the south of India. Yet this middle section have all the brains and it is they who provide the agitators who sow discontent. They claim that it is their right to rule the country, but we might well point out that as they are only the survivors of past invasions it is no more their country than ours. Furthermore, they know full well that it was only our arrival in that country that stopped further invasions, and if these had taken place they would have been overrun and given no opportunity to express any grievance at all.

These considerations raise a point of great importance. The original inhabitants of India who live in the south have never been sufficiently numerous or developed to govern the country. Hence India has always been ruled by invaders. The climate of the country is such, however, that if the conquerors remained in the country for two or three generations they degenerated and became unfit to rule and fresh invaders took their place. Under the British there has naturally been a constant stream of virile men coming from Great Britain to maintain our rule in India. Now that we are handing over so much control to a people who live in the country and who are not yet really acclimatised, shall we see a repetition of past failures?

It is possible that under modern conditions, with easy access to the hills in summer, the Indian may become gradually acclimatised and prove capable of maintaining rule, even though he lives and breeds in this degenerating climate, but if this proves to be true, it will be the first time in history that it has happened.

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sisted of a very small political party. They were out for their own ends regardless of the welfare of the country. If we had encouraged the very large loyal elements and strongly discouraged the disloyalists, all would have been well, but political pressure was brought from home in the opposite direction. We have already seen that this was due to ignorance of the true conditions. India paid heavily for the support that was accorded to the disloyal parties. She had to pay highly for borrowed money. Communal strife increased and trade decreased. All these things were due to the weakening of the position of the British official in India. It would in no way have been caused by a properly planned replacement of British officials as and when Indians were ready to take their place. This is now past history. We have attained a position in which the provinces have almost undisputed self-government; this is quite right and proper, though we could, of course, have reached that position with much less grief and trouble.

The next step of full Dominion status is still dependent on agreement among Indians, but before discussing this it will be as well to realise why our Civil Service in India failed to guide us clear of these troubles. This is necessary lest we should repeat the mistakes in the next stage.

If we had possessed a Civil Service in India with strong heads at the top all would have been well. The post-war disturbances would have died down. The more ardent pro-Indians at home, with their misplaced patriotic ideas for India, would have cooled off. There were still enormous numbers of loyal Indians ready to serve our cause which has always been the best cause for India. Most of these were at a loss to understand our weakness in dealing with the disloyal elements and with Congress, which had become a treasonable body. It was pathetic to talk to the retired Indian officers from the Army. They represent an intensely loyal and very fine body of men. "Why do you listen to this scum?" is what they said, "If only you would allow us to hit them on the head, we can assure you that you would have no further trouble."

But the Civil Service in India did not rise to the occasion. It is difficult to know why this should have been so. No doubt they lost many good men through the First World War. Then the introduction of the Montagu-Chelmsford Reforms provided assembly places for vocal though comparatively powerless bodies of Indian politicians. Then again, the gradual and inevitable introduction of Indianisation

into the lower grades of all the civilian services reduced their efficiency and made them less popular. Yet difficulties such as these had been faced before by our great Indian Civil Service, which had always produced the men to meet the occasion. But this time it failed. Perhaps the dice were unfairly loaded. During this period there were some weak Viceroys and some Secretaries of State for India who had no great knowledge of the true state of affairs in India. These were heavy handicaps for any Civil Service to carry so perhaps it was inevitable that they should largely have failed. Having failed to stem the tide, the Civil Service in India had to watch the rush of events, though most of them were quite convinced that we were riding for a fall. The more we gave in, the more was demanded, till we reached the impossible position with Congress at the beginning of the Second World War. During this time the heads of the Civil Services in India appeared to have lost their grasp of affairs. For instance, one met cases in which a district officer had quite rightly dismissed an influential but thoroughly bad and disloyal Indian from some post and had later been made to reinstate this man by his white superior. It is impossible to say why these men were so afraid of their own shadows. It started, of course, at the top and went down through people of medium seniority who were thinking about their pensions, and it did not cease till it reached youth who was too keen to accept such a position and resented this weakness.

A very striking case of this kind occurred on the North-West Frontier at Quetta between 1930 and 1932. At first we had some weakness on the political side at Quetta. The local Pathans, who consist for the most part of fairly lawless tribes, are quick to spot weakness. They started giving trouble and kidnapped a British officer and his wife. Instead of dealing very sternly with this at once, all manner of restrictions were issued. No officer was permitted to travel on certain roads without an escort. Now Quetta contained one of the biggest military garrisons in the Empire, and yet within ten miles of the centre of this great garrison we were restricted as to where we might go and what we might do. We became ashamed of the fact that we were Englishmen.

A little later Colonel Bruce arrived in charge as Agent to the Governor-General. This was of course a civil appointment, though Colonel Bruce had been a soldier. He knew the frontier and knew how to treat the Pathan. Incidentally the Pathan knew him and

knew that he would get justice but hard punishments if he erred, and he respected and probably in his inmost heart he had a strong affection for such a man. The Pathan is a real man and he likes a similar type of man to be over him. The moment that Colonel Bruce set foot in Quetta he declared all roads to be open and removed all restrictions. A few days later he decided to go to Fort Sandeman and announced his intention of doing so on the next day. His assistants (political officers) informed him that he could not do so as the military needed several days' warning to picket the hills. With a look of amazement on his face Colonel Bruce turned to them and said, "Do you really suppose that I am going to have the hills picketed by troops when I am passing through my own territory and among my own Pathans. Send word to the Maliks (the leaders of the Pathans) and tell them that I am passing through and that I will be very pleased to see the neighbouring Maliks when I reach Fort Sandeman; but I will not under any consideration have the roads picketed by troops."

The next day Colonel Bruce duly motored through to Fort Sandeman. On arrival there he met many Maliks who had come to greet him. They said to him, "The roads were not picketed by the military yesterday." "Of course not," replied Bruce. "You do not suppose that I was going to have the hills picketed when I was passing through your country do you?" To which the Maliks replied, "As soon as we saw that there were no pickets and that you were coming through, we picketed the hills ourselves to ensure that nothing happened to you." At last we had a head in Quetta who understood men like the Pathan, and we could again be proud of being British. But it was not to last long. Bruce belonged to a hard stern school. It was unlikely that they would do so, but if the Pathans had committed a crime they would most certainly have received a harsh but just punishment. Colonel Bruce would probably have shot the ringleader and buried him in a pig-skin. By their religion this would have eliminated all chance of the Pathan reaching heaven. He would have done this and reported the matter to Simla later. The Pathans would in no way have resented such treatment, and it would have been the right treatment and the right policy for the tribes on the frontier of India. But these views apparently belonged to the old school. Colonel Bruce was coming to the end of his time. We had all hoped that he would be given an extension, but this did not happen. Strong men were unpopular.

Within three weeks of his departure all the road restrictions round Quetta were reintroduced and we had again to be ashamed of being Britishers.

No doubt the views of the Legislative Assembly in India and unnecessary political interference from England accounted in part for this weakness at the heads of the civil services during this period. The former always seemed curiously irresponsible in its debates and discussions. It is possible that it will improve with added responsibility, but at present anyone with advanced Indian views at home who attends an average debate in the Assembly would be quite cured of his burning desire to hand over paramount power to them.

We had therefore reached this curious position (by the beginning of the Second World War) that we had decided to make very rapid progress in the advancement of political freedom in India against the advice of the greater part of the permanent staff in India. Never before had a few British politicians overridden the consolidated views of the permanent staff so easily. Did we make a great error for which both ourselves and India will have to pay heavily in the future, or is this still another case where by some strange instinct we headed in the right direction, though all those who are best qualified to judge considered that we took a wrong turning?

This naturally raises the question that if we took a wrong turning, which way should we turn? This can be answered in many ways, but here again people at home have formed the totally false conception that we have been forced to move in this direction; that the Indians would accept nothing less and that we had no alternative, quite apart from the fact that we have always promised the Indians the control of their own affairs. Let us therefore dispose of these misconceptions before we go any further. First of all, the number of people in India who pressed for these reforms numbered only a few thousands, or even less. There were hundreds of thousands beneath them who greatly desired to be employed in government work and they were often seen to be backing up the leading Indian politician in the hope of favours to come, but let it be quite clear that this latter class who know they cannot reach the higher positions would far rather have Britishers there than Indians. There is no question of our having been forced to grant these reforms. If the leading politicians in India came from the martial classes in the north we might have reason to fear delay in granting

reforms, but they come for the most part from the non-martial classes who have never been able to bring pressure to bear on anyone. Then again, people at home point to a parallel in Ireland. They prophesy terrorist activities if political advance is delayed; but they forget that there is practically no parallel in the two cases. In Ireland we had a virile race fighting for self-government; many of their treacheries were abhorrent to us, but they certainly produced many brave men who were ready to face death without any hope of publicity or reward in support of their cause. On the other hand, the Indian agitator is nearly always a first-class physical coward. It is true that there had been some terrorist activity in Bengal, but this would have been stamped out quite easily if the heads of the Civil Services had not been in this frightened state. It would have needed firm handling and swift but just punishments; such treatment would have been translated by many politicians at home into brutal conduct and pressure would have been brought to bear on these Civil Servants to stay their hand and they would not have been strong enough to carry it through. There is not the slightest doubt that swift justice would largely have eradicated these terrorist activities.

Some Further Points

No chapter about India would be complete without a mention of Gandhi. His fame was originally due almost entirely to the British Press and British politicians. At the end of Lord Reading's rule as Viceroy his fame was fast fading, when it was revived to a far greater extent by Lord Irwin. When he had broken the law of the land on previous occasions he had been imprisoned, and the rural population of India then doubted if he really was the hand of God, for how could God let his representative be imprisoned. Later under Lord Irwin he was constantly allowed to break the law without punishment and the country people thought that he must after all be the hand of God if the British Raj did not dare imprison him for acts for which they themselves would have been heavily punished. His fame rose to great heights, but he achieved nothing. It is impossible to attribute a single thought or action to Gandhi which has been of the slightest value to India. On the other hand, he has at times brought tremendous trouble to his country. Strikes and civil disobedience, resulting in loss of trade, communal riots

and hardships to the poor have followed in his wake. The riots have resulted in great loss of life, for which he must bear the responsibility. His fame is probably built on the fact that he has been quite selfless. He has always lived a very simple life and has never amassed a fortune, which he could easily have done. These are exceptional qualities which have brought him some degree of fame.

We have not so far mentioned the Indian States, which include about a third of the population of India. Our discussions have referred mainly to British India, which we have always ruled. The Indian States are quite separate from the provinces of India; they belong to the Empire and are very loyal members, but they have treaties with Great Britain which guarantee their rights; of these they are very jealous. They are content to rule, as they do at present, under a very superficial British control. They could probably be persuaded to accept a form of central control if the British retained paramount power, but it is very unlikely that they would accept the position if a central political body composed of Indians were given Dominion status.

Most of the views that have so far been propounded referred to Indians as a whole and to the general position in India during the last ten years. It is important, however, to remember that during our time in India we have slowly and gradually built up a Civil Service of Indians who have acquired many of our ways. Criticisms have been made of the ways of many of the more recently educated Indians holding official positions. These do not apply or at any rate only to a much smaller extent to the older officials who have been with the British service for a long time. Many of these Indian officials have magnificent records, but unfortunately their numbers are not great. In war a great expansion of such officials becomes necessary. The new entrants who have had little contact with British officials and their ways fall a long way below the level of older established Indian Civil Servants. As a result the bribery and corruption in India during the Second World War has been quite frightful. This could have been eradicated or at any rate kept in check by these older Civil Servants, but they were not prepared to do so. The majority of them came from the non-martial classes and were weak in character. They would not themselves have done these evil things, but they had not the strength of character to turn on the others and expose them. These older Indian Civil Servants

are intensely keen on the attainment of Dominion status. This is quite right and natural, but it makes one wonder whether India is really in any way ready for this when such a fine and important body is not prepared to take any real steps to stamp out a shocking condition of bribery and corruption.

On a small scale this form of bribery and corruption now exists all through India. An interesting example came to light quite recently. There was difficulty over the distribution of food in a certain province and it was decided to assist matters with a military transport organisation. For this purpose a number of young Indian Army Service Corps officers were needed. It was decided to take a number of students from a university and give them a special course. If they passed out they were to be given commissions. Before the course ended there was a passing out test by the senior instructor who was an Indian. The British officer who was in charge of the school decided to try an experiment. He told the instructor to tell the students that they had to pay ten rupees to him if they wanted to pass. They all paid up at once. The British officer then came on the scene. He explained this had been done as a test and the instructor then gave them back their ten rupees. The officer asked them why they had paid up so readily. They replied that they had discussed the matter among themselves and had come to the conclusion that one hundred rupees would be demanded of them. They had all come with one hundred rupees in notes ready to hand over and were very pleased when they found that ten rupees would suffice. They explained that everyone at the Indian university had to bribe the instructor in this way to get a degree or certificate.

This is the normal state of affairs throughout India. There are, however, a few exceptions. In at least two of the Indian States the ruler employs British officials under his Indian Ministers purposely to stop bribery and corruption. Both these States are exceedingly well run as a result. An interesting point arises from this that is worth recording. Englishmen usually work quite smoothly and happily under an Indian. There are naturally exceptions, but generally speaking there is quite good feeling when senior Indian officers are placed over junior British officers. Indian officers also command British personnel quite smoothly and happily. Good value often results from mixing the two in this way. The Indian is ashamed to try any form of corruption alongside British officers

and he takes great pride in giving of his very best when he is in charge of them. We must not be afraid or fight shy of this mixing together in future.

As regards India generally, we can sum up the position by saying that the Mohammedans have the physical strength and determination but little brain power. The Hindus lack courage and drive (except for certain classes that provide a noticeable exception to this), but they have as good brains as anyone. The Sikhs are a very much smaller body, but they are remarkable in possessing good brains and unlimited energy and physical strength.

These are by far the three most important sections in India. The Hindus want to rule India and they consider that they should be trusted to treat the remaining minorities fairly. The Mohammedans will never trust them and not without reason. Their solution is Pakistan, i.e. to rule the part of the country that contains mainly Mohammedans and leave the rest to the Hindus. The Hindus do not like this as they consider it is rather an insult to their sense of justice, but they might some day give way on this point. Pakistan would, however, never be accepted by the Sikhs, whose country is in the middle of the Mohammedan areas. They would fight to the finish before they would agree to that. The chance of any genuine agreement between the various sections of Indians is therefore negligible.

The Three Courses open to Us

We have now briefly studied the process of evolution in India during recent years and certain main facts about that country. From these considerations three courses of action are open to us.

The first is to retain at least as much power in our hands as we have at present and to rule India ourselves until such time as genuine agreement can be reached between the various sections in India. This will certainly take a very long time and may never be achieved. This is the course that would bring the greatest prosperity to India and we could carry this out with the utmost ease. It would, however, be morally wrong. It would not be accepted by the Government at home, even if they studied the country and knew anything about India, which is not the case at present.

The second course is to try and persuade the various sections in India to come to some patched-up form of agreement which would

enable India to be granted some degree of Dominion status. This course would be disastrous. The Indian States would never agree to come in with a Central government of this nature. Nor would there be any chance at present of any lasting peace between the various sections in India. This course would be certain to lead to civil war. In fact it is very unlikely that Congress would be prepared to take over Government under any terms of this nature. When civil war broke out it would be the Hindus that would be slain, starting with the Congress party. Most of the members of Congress would far prefer to bask in the sunshine of their present publicity and continue living on the fat of the land than to run any risk of being hurt in large-scale communal disturbances.

The third course lies in co-operation between the invaders for the government of India. That is to say, that the Indian invaders should co-operate with ourselves who are the latest invaders. Co-operation, however, between two parties is never very easy. One party must be predominant. In view of the fact that no one in India will accept the decision of an Indian on any communal question, it is obvious that the predominant party must be Great Britain.

In this way we have reached what seems to be the obvious and only solution of the great Indian problem. Full co-operation in the Central government, but with Great Britain remaining the dominant partner. If we decided on a measure of this nature and said so in no uncertain terms it would be accepted by the vast majority in India. It would, of course, be necessary to reward those who loyally accepted such a position and to do the reverse to those who were disloyal. We have never done this before because our nature is to placate our opponents and win them over to our side. This works well with the Anglo-Saxon race, but it is valueless in the East. We should have to make it quite clear that this decision was final and was to be loyally accepted by all who wished to progress.

There remain a number of points worth mentioning on the assumption that we accept the present position of almost complete self-government for the Provinces, and adopt co-operation with a predominant British position at the centre. First of all, there need be no fear that the British official in the Provinces will die out completely. The Indian is no fool, and when he sees quiet restored quite easily in a big town by the fact that there is one white man at the head of it, he will retain that man's services. At the centre

there would be no need for a large number of British officials, but those that were there would have to be real men; perhaps we might see the Home and Indian Civil Services amalgamated for these purposes, which would lead to a great advantage to both. The junior British Civil Servant would have his mind broadened by a tour of duty in India, and if he returned later to take up a high post in India he would know the country without having had his energy sapped by spending his whole life there.

In the past these high positions were filled by young men, which accounts for our past success in India, but with the development of stable conditions it is inevitable that these responsible positions must be filled by men of some age and standing. This may be no great handicap if the man has lived in a temperate climate, but an elderly man who has spent his life in India is usually very old.

Whatever form of government we may institute at the centre, it will have to possess the power of imposing its will on the Provinces and States, if the occasion should arise, in such a manner that there can be no question of refusal or resistance by that Province or State. This we have possessed in the past in the form of an Army in India officered by British officers, and this was probably one of the finest and most loyal armies in the world. This possession of an intensely loyal Indian Army officered by British officers has always been a stumbling-block to advanced political views in India. The Army always has the final word in any great political crisis, and the Indian politician has naturally wished to see the Army officered by his class in order to have it on his side. He has not wished to see Indian officers installed from the martial classes in the north. He would be in no way sure of their support; in fact they might control the politician instead.

There has naturally been much bickering on the subject of Indianising the Army in India, and it is worth examining as it shows the mentality of some Indian politicians. When it was decided to introduce Indian commissioned officers into the Army in India, proper preparations were made. Plans were prepared and scales of Indianisation adopted; there was no case of drifting into this and then losing all control at the top such as we have seen in the Civil Service. This put the Army in a strong position.

The stumbling-block in Indianising the Army in India is this, that whereas any average British boy possesses the necessary qualities of pluck and leadership which go to make a good officer,

in India only a portion of educated Indians can exhibit these qualities. The Indian politician sometimes pretends that this is not the case and that the type of Indian boy whom he wishes to see installed as a commissioned officer is perfectly capable of filling the role.

With Indian officers who came from the martial classes in the north the Army will remain efficient, but this is not always what the politician wants. It is his own kind that he may wish to see installed. This would definitely lower the efficiency of the Army. There is every advantage in having the right proportion of Indian officers for the portion of the Army that watches the North-West Frontier; when we come to the Field Army, which is held in reserve in India, other factors must be considered. Part of this Field Army must be ready to reinforce the North-West Frontier in the event of a serious tribal rising. This portion should consist mainly of Indian troops and with a right proportion of Indian officers. We have, however, already seen in Chapter 5 that we could and should have a fine modern striking force in this Field Army, using all the latest armoured and mechanised technique in war. This should be mainly a British force. It may have to be used to quell a serious outbreak between two rival parties in India and must, therefore, be neutral. Only the British Army can be neutral in India.

It is difficult to see why anyone should resent the retention of paramount power by Great Britain and backed by an army with British officers. We have already given the Provinces almost complete self-government. India is therefore like a continent in which the Indian Provinces are the countries. But instead of each country having to maintain an army for security and raising tariff walls, etc., against the neighbouring countries, all these problems are settled at the centre. The Provinces in India can count on complete freedom and security. All the defence questions and the main fiscal problems are settled at the centre. Just imagine how wonderful it would have been if we could have instituted such a system in Europe with predominant power in the hands of a nation which all the countries trusted. This is the position in India. It is a great gift. Why resent it, and why strive for changes in control at the centre which will be certain to reduce the security of those great Provinces?

It is possible that the reading of these notes may give the impression that the writer dislikes or despises the Indian. This is far

from being the case, and nothing of this nature was intended. The Indians are among the most courteous people in the world; they are most friendly and hospitable. The Indian gentleman from the centre or south of India has usually little in common with the British; according to our lights he does not usually possess enough manliness to suit our tastes, but this is no reason why we should misunderstand him. He has many other good qualities. He is clever and logical and a very shrewd judge of human nature, but he certainly does not possess the necessary qualities which make a successful ruler of people. The further north you travel the more manly they become, and you reach some very fine martial classes; but they one and all retain the cunning of the East, and none of them have the steadfast character of the British which has made us born rulers of men. It will be a sad day for India if and when misplaced zeal among politicians at home removes those rulers.

The greatest problem with which any future Government of India will have to deal is, of course, the constantly expanding population. Although India is almost entirely an agricultural country, she already has to import some food to feed even the present population. There is no doubt that it is possible to adopt a more intense type of agriculture to increase the yield, but India will eventually have to accept birth-control if she wants to raise and maintain a higher standard of living. There is little sign of this becoming accepted at present. Perhaps it is the will of God that India's path should lead to a great communal dissension. If we should have lost control by then, such dissension will lead to great wars and much slaughter. This may be His method of restoring India to a normal population, just as He brings a plague like brinderpest to a jungle when the deer becomes too numerous for the jungle to feed. The future of India is closely bound up with the welfare of the world and needs the earnest thought of all thinking people. The problem is only in its early stages at present; all the difficulties are ahead and they will have to be overcome by the British people; let us hope that the question will be studied so that they have more knowledge than they possess at present on the main issues raised in the early part of this chapter. Without this understanding we cannot hope to progress in the right direction.

The recent failure to find a solution of the problem in India supports the above views in every way.

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